

Smolt Monitoring Program Protocol and FPC32.net Data Entry Program User's Manual



Manual Version – **2013 Season**
Produced by: The Fish Passage Center (Last updated 2/21/2013)

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I. Smolt Monitoring Program (SMP) Protocol

I.A. Introduction to the SMP

There are two primary goals of the Smolt Monitoring Program (SMP): 1) to provide real-time data on juvenile fish migration to support in-season fisheries management decisions and 2) to provide a long-term time series of consistently collected data that allow for comparison of the impacts of changing river conditions among years, particularly with respect to juvenile fish survival. To achieve these goals, there are three components to the SMP: 1) PIT-tag marking at hatcheries, 2) PIT-tag marking and monitoring at Snake River Basin traps and Rock Island Dam, and 3) fish sampling at COE bypass facilities at Lower Snake River, and Columbia River dams.

This Protocol addresses the data that are collected for the SMP at COE bypass facilities at Lower Snake River and Columbia River dams. The sampling sites covered by this protocol include; Lower Granite Dam (LGR), Little Goose Dam (LGS), Lower Monumental Dam (LMN), McNary Dam (MCN), John Day Dam (JDA), and Bonneville Dam (BON). For the remainder of the document these sampling sites will be referred to as **Main-stem Monitoring Sites**. This protocol is meant to compliment the **Condition Sampling Protocol** and provides overall guidelines for sampling and data to collect.

In past years, the primary data gathered at these main-stem monitoring sites is count data on juvenile salmonids that are sampled from the bypass system. However, lamprey juveniles have been added to the list of target species for the SMP. These target species are identified to species and any clips and marks/tags are also recorded. Based on these count data (i.e., sample counts), an estimate of daily collection can be generated at each project. From estimates of collection, passage and population indices can be generated if the sample data are representative based on 24-hour sampling that is systematic and sample rates are known throughout that period. Estimates of passage and population indices will not be done for lamprey juveniles.

In addition to sample counts, data on fish condition are also collected. Two levels of condition data are collected based on the level of detailed information to be collected. For the full sample, fish are examined for descaling based on FTOT criteria. A subsample of the full sample is examined for detailed condition information, including descaling, injury, and disease. Salmonid fry are NOT examined for descaling or detailed condition information. All COE dam sites conduct detailed condition monitoring on salmonid species. In addition, BON, JDA, and MCN conduct detailed condition monitoring on juvenile and larval lamprey. The protocol for examination of fish for detailed condition monitoring can be found in a separate document entitled **Condition Sampling Protocol**.

I.B. Summary of Data to be Collected for the SMP

I.B.1 - Target Species and Species Identification

The target species for the SMP include juvenile salmonids and larval and juvenile lamprey. Among the juvenile salmonids that are considered target species are: 1) yearling (age 1) and subyearling (age 0) Chinook (*Oncorhynchus tshawytscha*), 2) Sockeye (*O. nerka*), 3) Coho (*O. kisutch*), and 4) Steelhead (*O. mykiss*). Among the larval and juvenile lamprey that are considered target species are: 1) pacific lamprey (*Lampetra tridentatus*) ammocoetes, 2) pacific lamprey (*L. tridentatus*) macrophthalmia, 3) brook lamprey (*Lampetra richardsoni*) ammocoete, 3) and unknown ammocoete.

The above species make up the majority of the fish that are collected for the SMP. However, incidental species are also of interest. Incidental species should also be identified and counted.

The Fish Passage Center recommends using the “**Columbia River Basin Juvenile Fish Field Guide**” published by Pacific States Marine Fisheries Commission for identifying juvenile fish and incidental species.

I.B.2 - Species-Specific Data to Collect:

For each of the target species, there are additional species-specific data that are to be collected for the SMP. Below is a brief explanation of each of these pieces of species-specific data.

Age Code:

Age Code is used for Chinook only. Chinook are to be assigned an age of “1” or “0” based on morphology and size. A discussion of the morphological criteria can be found in **Section VIII.B.1**. Chinook fry are age 0.

Special Species Code:

There are four possible **Special Species Codes** that are to be recorded for particular target species of the SMP. These four **Special Species Codes** correspond to salmonid juveniles only. Below is a brief explanation of each of the Special Species Codes, along with details as to which target species apply.

Eroded Fin (EF) for unmarked steelhead with eroded fins. This Special Species Code is used to identify hatchery steelhead that are otherwise unmarked.

Lyons Ferry Yearling Fall Chinook (LF) for yearling fall Chinook that are known to have been reared at Lyons Ferry hatchery

Holdover Fall Chinook (HO) for yearling fall Chinook that are identified as being holdovers, based on size and morphology. See **Section VIII.B.1** for detailed description of how to identify holdover fall Chinook.

Fry (FR) for Chinook and coho fry based on size (60mm or less). See **Section I.B.3** below for fry handling protocol.

Clipping, Marking, and Tagging Data:

In order to aid in the identification of origin, the SMP collects information on the clipping, marking, and/or tagging of target salmonid species. Below is a

brief explanation of the various clipping, marking, and tagging information that are to be collected for the SMP. See **Sections VIII.B.1 and VIII.D.1** for more information on these categories.

Fin Clips are recorded on all target salmonid species at all sites. Fin clips include Adipose, Left Vent, and/or Right Vent clips (or any combination of the three. If a fish has any of these clips, that fish is considered “Clipped”.

Elastomer Tags are to be recorded on all target salmonid species at all sites. For fish that have Elastomer tags, sites are expected to record tag location and tag color, in addition to species, special species, and clipping information.

Coded Wire Tags are to be recorded for all unclipped Chinook (age 0 & 1), unclipped coho, and unclipped sockeye that are sampled **at LGR, LGS, LMN, WTB, LEW, and GRN**. This request was based on the increasing proportion of hatchery releases that are otherwise unclipped or unmarked. By including CWT data, SMP can differentiate many unmarked hatchery fish from wild origin fish. This is important for use in run-reconstruction, wild fish population estimates, timing data and other analyses of wild origin stocks.

Descaling Data:

Descaling data will be collected on all target salmonid species in the sample (**except Fry and those salmonids that are sampled as part of the Gas Bubble Trauma program**). Larval and juvenile lamprey will not be examined for descaling. Fish that are part of the detailed condition sample will be examined for descaling as well as other indices of fish health status (See the **Condition Sampling Protocol** for more information). Other fish that are sampled but are not part of the detailed condition sub-sample, are considered non-condition fish. These non-condition fish will be examined for descaling, based on the FTOT protocol. A fish will be recorded as descaled if at least 20% of either side of the fish is descaled.

Descaling is defined as areas of the fish where scales have been removed by mechanical or other means (including predators) and it cannot be determined that scales have regenerated or healing has occurred. When in doubt examiner should report the fish as descaled. Consistency is important since changes in descaling rate are what triggers management action.

Mortality Data:

Fish that are found dead in the sample or die during or after handling should be recorded as mortalities in the non-condition sample. See the **Section VIII.B.1** for more details about what data to record.

I.B.3 – Fish Sampling at Main-stem Monitoring Sites

Sample Size Targets:

Fish Passage Center recommends collecting between 300 and 500 fish for the Smolt Monitoring Program at main-stem sites. These target sample sizes

correspond with the goal of achieving accurate and precise estimates of total collection at the dams. These sample sizes have been reduced from historic sampling targets in an attempt to reduce fish handling. The above target **includes** fish that are examined for detailed condition monitoring.

Recommended Sample Rates:

Sites should use the table below to determine sample rates. Use a sample rate that achieves the target sample sizes of 300 to 500 fish (when possible). Typically, Lower Columbia sites should limit sample rates to at or below 25% except when increased numbers of fish may be needed for research or to address immediate management needs. **Avoid using sample rates between 12% and 25% whenever possible to avoid impacts to sample accuracy as well as to minimize impacts to PIT-tag studies near the divert during sample (DDS) trigger of 20%.** When possible, sites should **try to avoid the 0.6%, 0.67%, 0.7%, 1.5%, 3.0%, 7.0%, and 15% sample rates as much as possible, as they have the highest probability of causing rounding errors in data reports.** Sites should attempt to minimize the number of times per season sample rates switch from above to below 20%, or from below to above 20% to minimize the number of times the DDS is turned on or off.

Estimated Daily Collection	Sample Rate (%)	Equivalent Multiplier (1/sample rate)	Sample Seconds/Hour	Subsamples Per Hour	Subsample Duration (sec.)	Estimated Number of Fish in Sample
Emergency	0.5	200	18	2	9	
50,000-75,000	0.7	143	25.2	2	12.6	350-525
35,000-50,000	1.0	100	36	3	12	350-500
20,000-35,000	1.5	66.6	54	4	13.5	300-525
15,000-20,000	2.0	50	72	6	12	300-400
10,000-15,000	3.0	33.3	108	6	18	300-450
7,500-10,000	4.0	25	144	6	24	300-400
6,500-7,500	5.0	20	180	6	30	300-375
4,500-6,000	7.0	14.3	252	6	42	315-420
3,000-4,500	10.0	10	360	6	60	300-450
2,500-3,000	12.5	8	450	6	75	313-375
1,500-2,500	20.0	5	720	6	120	300-500
1,000-1,500	25.0	4	900	6	150	250-375
600-1,000	50.0	2	1,800	6	300	300-500
<600	100.0	1	3,600	1	3,600	< 600

* Carry multipliers to 3 digits total, then round (1/multiplier,3) will provide a sample rate to nearest 10th place that is correct. For custom sample rates, it may be necessary to carry to 6 digits beyond the decimal place if rate results in longer than 6 digits.

** During periods of peak juvenile shad passage, lower sample rates than needed to meet salmonid sample goals may be used to reduce handling and mortalities of shad.

Anesthetic:

Research funded by COE has shown that MS-222 can degrade relatively rapidly causing added stress to fish as a result. Degradation was found to occur within a few weeks of mixing the dry powder with water. In order to minimize stress to fish it is recommended that batches of MS-222 be mixed in quantities to assure that these mixed (i.e. liquid) batches will be used within 1 week to 2 weeks of being prepared. It is unclear what impacts degradation will have on fish, but to be conservative, mix as small a batch as is practical to avoid impacts of anesthetic. Sites should try to minimize the amount of time that fish are in anesthetic to approximately 15 minutes or less.

Fry Handling Protocol:

It is recommended that fry (Chinook or Coho $\leq 60\text{mm TL}$) not be handled more than is necessary to collect information on the species and counts. It is preferred that sites avoid anesthetizing fry by netting them directly from the sample tank, if this is possible. In this case a sanctuary net should be used to remove these fish only if it is possible with minimal disruption to other fish. Chasing fish to capture them would increase stress to the fry and other fish in the holding tank so only net those individuals that can be easily captured with a sanctuary net.

If fry are anesthetized, sites should work them up immediately but only for species identification and count purposes only. **Fry are not to be examined as part of the condition monitoring**, as this would mandate anesthetic and increase the time that they are handled. In general, sites should begin working up the smallest fish and fish that are deepest in anesthetic first and move to larger fish.

II. Introduction to FPC32.net

II.A. The Fish Passage Center (FPC)

The Fish Passage Center (FPC) provides current and historic data on salmon and steelhead passage in the main stem Snake and Columbia River Basins. Data from the **Smolt Monitoring Program (SMP)** are intended to provide the information basis for federal, state and tribal recommendations for fish passage in the Federal Columbia River Hydro-electric System. In addition to real-time access to SMP data, the FPC provides data about river conditions, hatchery releases, smolt migration and adult returns.

The FPC plans and implements the annual **Smolt Monitoring Program (SMP)** that provides daily information for in-season management decisions. The FPC also provides the agencies and tribes, and the FPC Board of Directors, with reservoir operation information and analysis, including current and historical data.

During the in-river migration season, FPC summarizes current conditions in a Weekly Report. FPC also provides web distribution of System Operation Requests (SORs) made by the Salmon Managers. SORs are requests to the U.S. Army Corps of Engineers to operate the federal hydrosystem to protect or enhance in-river fish passage and survival conditions.

If you would like more information or to view Weekly Reports and SORs please visit our web page www.fpc.org, or contact our office at (503) 230-4099.

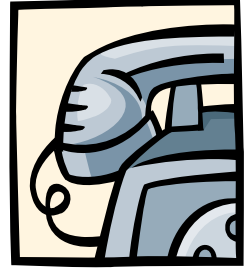
II.B. Remote SMP Site Data Entry Program (FPC32.net)

The FPC32.net data entry program was originally designed as an organized method of obtaining fish and water flow data from remote **Smolt Monitoring Program** sites. The software program has changed names slightly over the years, beginning with RSDEP (Remote Site Data Entry Program). Later it was ported to Windows and named FPC32. The current version is FPC32.net, Version 3.0.0.10. It has many improvements including a touch screen for entering fish condition data and the batch data entry is now done through forms.

This manual has been provided for the biologist who input the data as a reference to assist in the operation of the FPC32.net program. It is essential that all SMP personnel who are responsible for entering fish data into the FPC32.net program and corresponding with the FPC **read and understand** this manual. If any questions arise, please call **Brandon Chockley** at the Fish Passage Center (503) 230-5362 with questions. After the manual is read by each individual SMP remote site staff member; please sign the form on the last page of the manual, which acknowledges that you have read the manual, and return the signed form to Brandon Chockley at the Fish Passage Center.

III. FPC Contacts & Correspondence

III.A. Personnel to Contact For Technical Help.



- **Brandon Chockley** – SMP Co-Manager (503) 230-5362
bchockley@fpc.org
Weekend number: 503-521-0184
Contact Brandon for questions about definition of a specific fish condition, change / addition to procedures, GBT questions, and questions on how to enter data or information using FPC32.net and how to run or use specific commands. Brandon is the principle contact for the SMP program.
- **Jerry McCann** – SMP Co-Manager (503) 230-4291 jmccann@fpc.org
Weekend number: 503-432-0676
Contact Jerry for questions about definition of a specific fish condition, change / addition to procedures, GBT questions, etc.
- **Christopher McCarty** - Computer Specialist (503) 230-4582
cmccarty@fpc.org.
Weekend number: 503-851-1549.
Contact Chris for computer hardware / windows and software setup technical problems, i.e. problems with computer hardware errors and issues.
- **Lynnae Sutton** – Data Management Specialist (503) 230-4290
lsutton@fpc.org
Weekend number: 503-720-8205
Contact Lynnae for questions about how to enter data or information about using FPC32.net and about how to use site-specific database management tools.
- **Main Line / Voice** (503) 230-4099
Leave a message at the front desk for other questions not identified here.

III.B. Correspondence.

- Fax for hand logs – (503) 230-7559.
- Main SMP E-mail for batches **and hand logs** – smp@fpc.org.
- Reposting E-mail – repost@fpc.org.
- GBT E-mail – smp@fpc.org
- FTP site – ftp.fpc.org.
- Web site – www.fpc.org.
- Mailing Address – 1827 NE 44th Ave., Suite 240, Portland, OR 97213.

III.C. SMP Remote Site Facilities and 2013 Dates.

- **Bonneville Dam Powerhouse 1 (BO1)** – Pacific States Marine Fisheries Commission

- **Bonneville Dam Powerhouse 2 (BO2)** – Pacific States Marine Fisheries Commission
- **Grande Ronde River Trap (GRN)** – Oregon Dept. of Fish and Wildlife
- **Imnaha River Trap (IMN)** – Nez Perce Tribe
- **John Day Dam (JDA)** – Pacific States Marine Fisheries Commission
- **Lewiston Snake River Fish Trap (LEW)** – Idaho Dept. of Fish and Game
- **Little Goose Dam (LGS)** – Oregon Dept. of Fish and Wildlife
- **Lower Granite Dam (LGR)** – Washington Dept. of Fish and Wildlife
- **Lower Monumental Dam (LMN)** – Washington Dept. of Fish and Wildlife
- **McNary Dam (MCN)** – Washington Dept. of Fish and Wildlife
- **Rock Island Dam (RIS)** – Chelan Public Utility District
- **Whitebird Salmon River Trap (WTB)** – Idaho Dept. of Fish and Game.

Smolt Monitoring Dates for 2013	
BO2	March 12 - October 31
GRN	March 5 - May 26
IMN	March 5 - May 26
JDA	April 2- September 17
LEW	March 1 - May 31
LGS	April 2- October 31
LGR	March 26- October 31
LMN	April 2 - September 30
MCN	April 2 - September 30
RIS	April 2 - August 31
WTB	March 1 - May 31

Send in your daily batch via email and your daily batch hand logs via fax or e-mail. Send this information into FPC prior to the end of the business day or early the next morning. FPC should only lag one day behind the current day's batch information.

IV. Glossary

Bypass Facilities – Smolt bypass facilities, smolt bypass/collection facilities. These terms refer collectively to the mainstream dam remote SMP sites of BO1, BO2, JDA, MCN, RIS, LMN, LGS and LGR.

Coded Wire Tag – A small piece of wire inserted into the surface of a fish's nose, which has been coded with information about the origin of the fish.

COE Daily Report – The US Army Corps of Engineers produces many hydrological reports containing measurements of various hydro system parameters.

Descaled – For SMP basin-wide purposes, when a fish is at more than 20% descaled on either side as determined by ocular measurement, the fish is considered descaled, even if descaling was clearly caused by predation in which case it would be considered descaled “with predation marks present”. Descaled fish tagged with PIT tags that are entered into PTAGIS are segmented into three descaling categories: at least 10% descaled, between 10-20% descaled, and greater than 20% descaled. This last PTAGIS descaling category is similar to the basin-wide SMP definition of a “descaled” fish.

Electronic Batch – The (.xml) file, which is sent from the remote SMP sites to FPC each sampling day of the fish migration season. This file is a text file formatted in xml notation.

External Mark – Fish tags or marks, which are readable through simple visual inspection. Floy Tags, Freeze Brands, Elastomer Tags, and Visual Implant tags are examples of External marks. PIT tags and Coded Wire Tags are not considered external marks, since they are not readable through simple visual inspection.

FPC32.net – The current Windows version of the Fish Passage Center's Remote Site Data Entry Program for the Smolt Monitoring Project (SMP). This program can run under these operating systems: Windows XP or Windows 7.

Freeze Brands – A form of external mark whereby a fish is branded with a mark using a super-cold branding iron.

Ftp client – A program installed on a computer that enables the user to download files from FTP sites on the Internet using File Transfer Protocol (FTP).

Gas Bubble Trauma Monitoring Program – Also referred to as GBT monitoring. This is a monitoring program, which examines fish after they pass through dams to monitor and measure biological effects from dissolved gas.

Incidental Catch – Fish that are caught in the sample tanks at Remote SMP sites that are not one of the four main anadromous fish species whose passage is monitored in the Smolt Monitoring Program. The target species for the SMP are Chinook Salmon, Sockeye Salmon, Coho Salmon, Steelhead, and juvenile lamprey (both Pacific and Brook Lamprey).

Julian Date – In Basin biological terms, the number of the day of the year, from 1-365. In computer software terms, the number of days after Julius Caesar changed the Roman calendar from the old Roman lunar calendar to the new Julian Sun calendar in 44BC.

KCFS – Kilo (or thousands of) cubic feet per second--a quantity measurement of liquid flow. A commonly used measurement scale at main stem dams in the Columbia and Snake River basin.

Major Species – The four anadromous salmonid species that are monitored in the Columbia/Snake River basin, Chinook (*Oncorhynchus tshawytscha*), Sockeye (*O. nerka*), Coho (*O. kisutch*), and Steelhead (*O. mykiss*).

Mark Recapture – When an externally marked fish is recaptured and observed at an SMP remote sample site, it is called a “mark recapture” or “mark recap”. The marks that are considered “external” are elastomer tags; freeze brands, floy tags, and visual implants. PIT tags and coded wire tags and blank cheek tags are not considered external marks.

Multiplier – The mathematical inverse of the sample rate, I.E. one over the sample rate. (1/sr)

Pick List - Drop down menu, List Box, or any popup menu, which uses a scrolling highlighted bar to mark the desired choice.

PIT tag – Passive Integrated Transponder Tag. This is an internal mark, which is used in the SMP predominately to measure travel time down the hydro system. SMP PIT tag marking sites are generally Rock Island, White Bird, Lewiston, Imnaha, and Grand Ronde. The PIT tag is a small glass cylinder approximately 1mm in diameter x 10 mm in length, which contains a small coil and chip which transmit a tiny 134.7 kHz radio signal when excited by a 134.7 kHz radio frequency signal.

Raceway – Part of the juvenile bypass system at main stem dams that are transportation sites (LMN, LGS, LGR, and MCN). Raceways are large water troughs where the fish are stored awaiting transportation by truck or barge after they have passed through the bypass system and/or the sample tanks and recovery tanks.

Rearing disposition – A fish is reared in the wild, or it is reared in a hatchery, or where it was reared is unknown.

Remote site – The locations, (remote to FPC), where SMP sampling takes place. There are currently four remote sites that are fish traps in rivers, and seven remote sites at main stem dams on the Snake and Columbia Rivers.

Repost – (revise and resend) – When an SMP batch of data is resent to FPC from a remote site for any reason, it is called a repost. Reasons for reposting a batch of data can vary widely and include such things as intermittent Internet email failure and erroneous data entry that was not picked up by the error checking algorithms.

Separator – This is part of the juvenile bypass system at main stem dams, which have a juvenile bypass system. The separator is designed to let small fish pass through, and keep mini-jacks, jacks, and adults out of the juvenile bypass system. The separator is also part of the dewatering system in the juvenile bypass systems that removes water and increases the statistical density of fish within a given volume of water passing through the system.

Smolt – An anadromous fish that is migrating down river, towards the ocean. In the SMP, the use of the term smolt almost always refers to the four monitored anadromous fish species. As a juvenile anadromous fish begin to move down river, morphological changes can occur to the juvenile fish. For example, some species will “silver up” or become more silver in color. As another example, fall Chinook will become more “football shaped” as they reach the time to migrate downstream.

SMP – Smolt Monitoring Program, the program to monitor and evaluate the four main anadromous fish species in the Columbia/Snake River basin.

Sub-batch – Each batch of electronic data sent from the remote sites to FPC can contain multiple sub-batches, but not all batches do. Some batches only use the default sub-batch number for the entire batch, which is “01”. Usually, one creates a sub-batch for each change in the sample rate during a 24-hour sample. Up to 99 sub-batches can be made for each batch of submitted SMP data.

Transportation – At LGR, LGS, LMN, and MCN, sometimes referred to as the four collector sites, juvenile anadromous fish headed downstream are collected and transported via barge or truck to a place in the river downstream from Bonneville Dam, where they are unloaded back into the river. The transportation program was created to attempt to mitigate the negative health effects on anadromous fish of in-river passage through the hydro system.

Trap Facilities – This refers collectively to the remote site SMP river traps of LEW, WTB, IMN, and GRN.

Validation process – In terms of the SMP, there are multiple levels of the “validation process”. First of all, a statistical quality control process is applied to the submitted electronic batches and hand logs, and any discrepancies and possible errors are brought to the attention of the remote site that submitted the batch for possible correction by the remote site. Secondly, each week during fish migration season a spreadsheet containing all of the data submitted year to date from a remote site is sent to the remote site to ensure that what FPC has in its database matches what the remote site has in its database.

Wire Tag – A wire tag can be a coded wire tag (CWT) or a blank wire tag.

NOTE: FISH CONDITION terminology is located in a separate manual.



V. Site by Site SMP Overview

Migration year 2013 is the fifth season when all SMP sites will be using FPC32.net for data entry. A detailed site-by-site overview is provided below which outlines what type(s) of data are being collected. Also, below is a brief step-by-step outline of how the various types of data will be entered and processed using the FPC32.net data entry program.

1. For the remote data entry sites (**BO2, JDA, MCN, LMN, LGS, and LGR**), once fish are in hand, site personnel will use the FPC32.net fish condition touch screen to enter detailed condition data (**Section VIII.H**). Trap sites (**LEW, GRN, WTB**) and **RIS** do not collect fish condition data and, therefore, will not use the condition touch screen. A more detailed description of sample sizes, target species, and condition definitions with examples is provided in **Section I** of this manual.
2. Simultaneously, all SMP site personnel will continue to tally information on non-condition fish in the sample, by species and clip-code using existing counting stations. These data will be recorded onto hand logs.
3. Once sampling is completed, detailed condition data will be transferred from the wet lab computer and imported into the office computer (**Section VII and VIII**).
4. Non-condition data will be entered from hand logs using FPC32.net (**Section VII and VIII**). Entry of non-condition data begins with the **Catch** screen, followed by the **Catch Detail, Incidental Catch, and Mark/Recaptures**. After non-condition data have been entered into FPC32.net, these data are validated (**Section IX**).
5. Condition data are then validated via the **Conditions** tab and/or **Individual Fish Condition Report**. After validation, condition fish are incorporated into the overall batch via promotion from the **Summary Cond.** tab.
6. Where applicable, after entering non-condition data and promoting condition data, transportation data are entered via the **Transportation** tab.
7. Reports are printed (**Section X**), and data are sent to FPC for posting into the central database (**Section VII.K**) and the FPC website.

V.A. Bonneville Dam Powerhouse 1.

No sampling will be conducted at Bonneville Powerhouse 1 in 2013.

V.B. Bonneville Dam Powerhouse 2.

Smolts will be examined for various factors including species, fin clips, marking data, and detailed fish condition data, including descaling. Fish from the general population are obtained from a timed sub-sample of fish diverted from the bypass channel during a 24-hour interval between 7am and 7am daily. Examination of fish may occur throughout the 24-hour sample interval, as necessary.

GBT monitoring is conducted at this site. See **Gas Bubble Trauma Monitoring Protocol and GBT.net Data Entry Program User's Manual**.

V.C. Grande Ronde River Trap.

Operate a scoop trap on the lower Grande Ronde River 5 km upstream of the mouth seven days per week for a 12-week period. The primary function of this site for SMP is to PIT-tag out-migrating smolts.

V.D. Imnaha River Trap.

Operate of the screw trap in the lower Imnaha River seven days per week. The primary function of this site for SMP is to PIT-tag out-migrating smolts. The Nez Perce Tribe provides data on fish collection based on a prior agreement, no funding is provided by SMP.

V.E. John Day Dam.

Smolts will be examined for various factors including species, fin clips, marking data, and detailed fish condition data, including descaling. Fish from the general population are obtained from a timed sub-sample of fish diverted from the bypass channel during a 24-hour interval between 7am and 7am daily. Examination of fish may occur throughout the 24-hour sample interval, as necessary..

V.F. Lewiston Trap.

Operate a dipper trap on the lower Snake River at Lewiston for a 12-week. The primary function of this site for SMP is to PIT-tag out-migrating smolts.

V.G. Little Goose Dam.

Smolts will be examined for various factors including species, fin clips, marking data, and detailed fish condition data, including descaling. Fish from the general population are obtained from a timed sub-sample of fish diverted from the bypass channel during a 24-hour interval between 7am and 7am daily. Sample smolts from the collection for counts by species and clipped/unclipped status. Examine all unclipped yearling Chinook for coded wire tags.

GBT monitoring is conducted at this site. See **Gas Bubble Trauma Monitoring Protocol and GBT.net Data Entry Program User's Manual**.

V.H. Lower Granite Dam.

Smolts will be examined for various factors including species, fin clips, marking data, and detailed fish condition data, including descaling. Fish from the general population are obtained from a timed sub-sample of fish diverted from the bypass channel during a 24-hour interval between 7am and 7am daily. Sample smolts from the collection for counts by species and clipped/unclipped status. Examine all unclipped yearling Chinook for coded wire tags.

GBT monitoring is conducted at this site. See **Gas Bubble Trauma Monitoring Protocol and GBT.net Data Entry Program User's Manual.**

V.I. Lower Monumental Dam.

Smolts will be examined for various factors including species, fin clips, marking data, and detailed fish condition data, including descaling. Fish from the general population are obtained from a timed sub-sample of fish diverted from the bypass channel during a 24-hour interval between 7am and 7am daily. Sample smolts from the collection for counts by species and clipped/unclipped status. Examine all unclipped yearling Chinook for coded wire tags..

GBT monitoring is conducted at this site. See **Gas Bubble Trauma Monitoring Protocol and GBT.net Data Entry Program User's Manual.**

V.J. McNary Dam.

Smolts will be examined for various factors including species, fin clips, marking data, and detailed fish condition data, including descaling. Fish from the general population are obtained from a timed sub-sample of fish diverted from the bypass channel during a 24-hour interval between 7am and 7am daily. Sample smolts from the collection for counts by species and clipped/unclipped status. Examine all unclipped yearling Chinook for coded wire tags..

GBT monitoring is conducted at this site. See **Gas Bubble Trauma Monitoring Protocol and GBT.net Data Entry Program User's Manual.**

V.K. Rock Island Dam.

Smolts will be examined for various factors including species, fin clips, marking data, and detailed fish condition data, including descaling. Fish from the general population are obtained from the bypass channel during a 24-hour interval between 7am and 7am daily. Sample smolts for counts by species and clipped/unclipped status. In addition another primary function of this site for SMP is to PIT-tag out-migrating smolts.

GBT monitoring is conducted at this site. See **Gas Bubble Trauma Monitoring Protocol and GBT.net Data Entry Program User's Manual**.

V.L. Whitebird Trap.

Operate a scoop trap on the lower Salmon River above Whitebird for a 12-week period five days per week. The primary function of this site for SMP is to PIT-tag out-migrating smolts.



VI. System Requirements & Program Installation

The FPC32.net program was designed and tested on Windows XP. It has not been tested on newer Windows operating systems, but should operate properly in those environments. FPC32.net will not operate in Windows 2000 or older operating systems.

VI.A. Hardware and Software.

1. PC Details:

A PC running **Windows XP** with Service Pack 2 or later, with at least 512MB of RAM to run the FPC32.net program (1 GB recommended) and at least 1 GB of hard drive space (2 GB are recommended).



2. Software:

- A. FPC32.net runs on **Windows XP** and **Windows 7**.
- B. An internet e-mail connection capable of sending files attached with base 64 encoding.

3. Communication Devices:

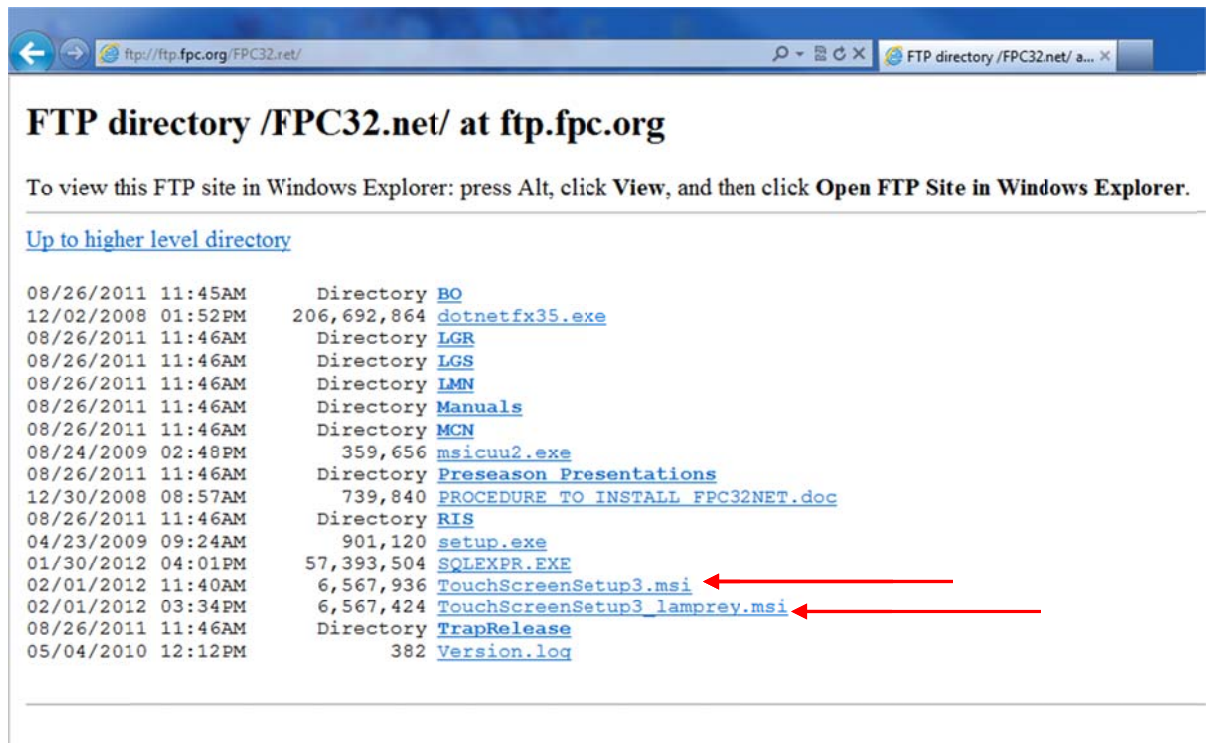
- A. A printer (preferably a laser printer that understands PCL 4 or above) to print the daily reports.
- B. Access to a Fax machine or e-mail account to send daily hand logs to FPC.
- C. An appropriate modem or other types of communication hardware for other types of internet connections such as a cable modem, DSL or ISDN.
- D. A thumb drive or other portable device for carrying batch files (.XML files) from wet lab touch screen computer to data entry computer.



VI.B. Procedure to Install the FPC32.net Program (including the fish condition touch screen)

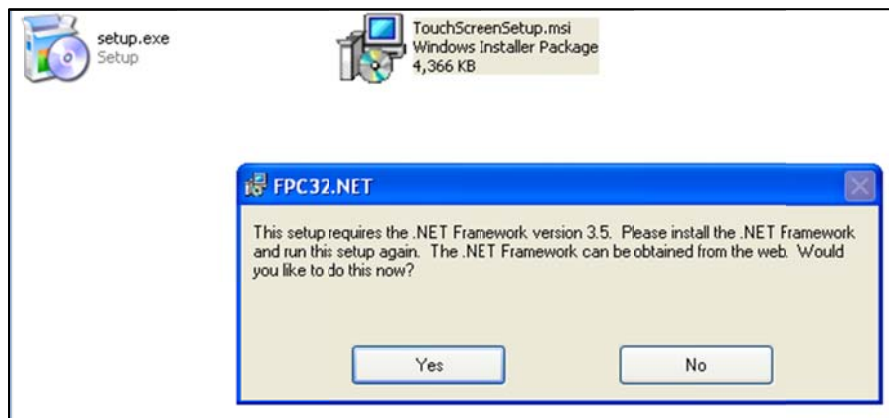
- 1. To install this program you will need to have **Windows XP** (or a newer version of **Windows**).
NOTE: If you already have **Windows XP** with **Service Pack 3** (or a more recent version of **Windows**), you do not need to install **Microsoft .NET Framework 3.5** (or higher).
- 2. Within **File Explorer** make a temporary directory to save the installation program files. In this procedure, this directory is referred to as **c:\installfpc32net**.

3. Open **Internet Explorer** and go to <ftp://ftp.fpc.org/FPC32.net/>. Right-click on **setup.exe** and choose **Save Target As...** Navigate to **c:\installfpc32net** and save this file to this directory
 - LGR, LGS, LMN, RIS, WTB, LEW, and GRN – Right-click on **TouchScreenSetup3.msi** and choose **Save Target As...** Navigate to **c:\installfpc32net** and save this file to this directory
 - BON, JDA, MCN – Right-click on **TouchScreenSetup3_lamprey.msi** and choose **Save Target As...** Navigate to **c:\installfpc32net** and save this file to this directory

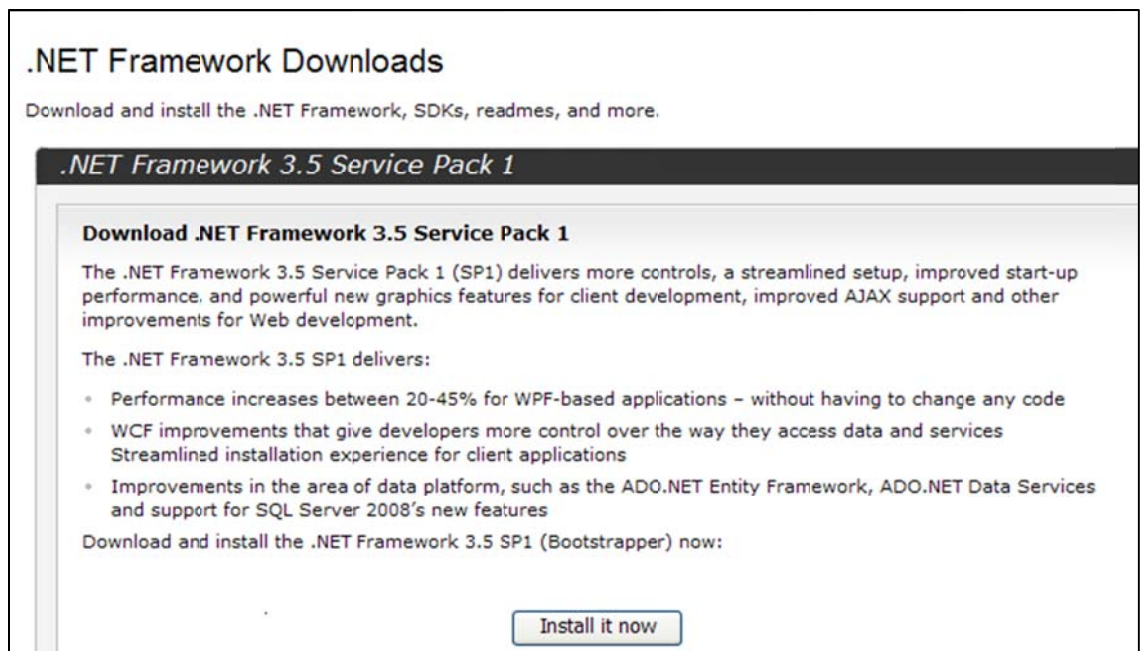


4. Once the files have been saved to your local hard drive, using **File Explorer**, navigate to **c:\installfpc32net** and double-click on the **TouchScreenSetup3.msi** (or **TouchScreenSetup3_lamprey.msi**) file to begin the installation process

Note: If you are installing this from a CD, open **File Explorer** and navigate to the directory of the CD and double-click on the **TouchScreenSetup3.msi** or **TouchScreenSetup3_lamprey.msi**.
5. This program requires **.NET Framework Version 3.5** (or better) and **Microsoft 2005 SQL Express** edition software packages to be installed. After you double-click on the .msi file, you will be prompted to install **.NET Framework Version 3.5** (if you don't already have it).
6. Choose **Yes**



7. After selecting **Yes**, your default internet browser will open to the URL <http://msdn.microsoft.com/en-us/netframework/aa569263.aspx>.
 - If the dialog box asking you to choose **Yes** to install **.NET Framework** does not appear, manually open **Internet Explorer** and open the URL <http://msdn.microsoft.com/en-us/netframework/aa569263.aspx> **OR**
 - Go to <ftp://ftp.fpc.org/FPC32.net/>, right-click on the file **dotnetfx35.exe** and choose **Save Target as**, and navigate to a temporary file on your hard drive and save the file. Double-click on the file to begin the installation of the **.NET framework**. **OR**
 - If you are installing this from a CD, double-click on the file **dotnetfx35.exe** from the CD directory and follow the installation procedure prompts, using default prompts.
8. From the <http://msdn.microsoft.com/en-us/netframework/aa569263.aspx> website, select the **INSTALL IT NOW** button.



9. Once the **.NET Framework 3.5** installation program has completed downloading, choose to **Run** the program.



10. After you choose to **Run** the program, the computer begins downloading and installing the **.NET Framework 3.5** software.
NOTE: If you receive a message that the .NET framework is already installed on your computer, proceed to the next step.
11. Once the installation of this software is complete, you will also be required to install **Microsoft SQL 2005 Express**.
12. Download **Microsoft SQL 2005 Express** from the FPC website <ftp://ftp.fpc.org/FPC32.net/> by right-clicking on the file **SQLEXPRESS.EXE** and choosing **Save Target as**. Navigate to a temporary file on your hard drive and save the file.



13. Double-click on the **SQLEXPRESS.EXE** file to begin the installation. Follow all prompts and accept all default settings.
14. Once the **.NET Framework 3.5** and the **Microsoft SQL 2005 Express** edition have been installed on your local computer, open **File Explorer** and navigate back to **C:\installfpc32.net**. Double-click on the **TouchScreenSetup3.msi** (or **TouchScreenSetup3_lamprey.msi**) file.

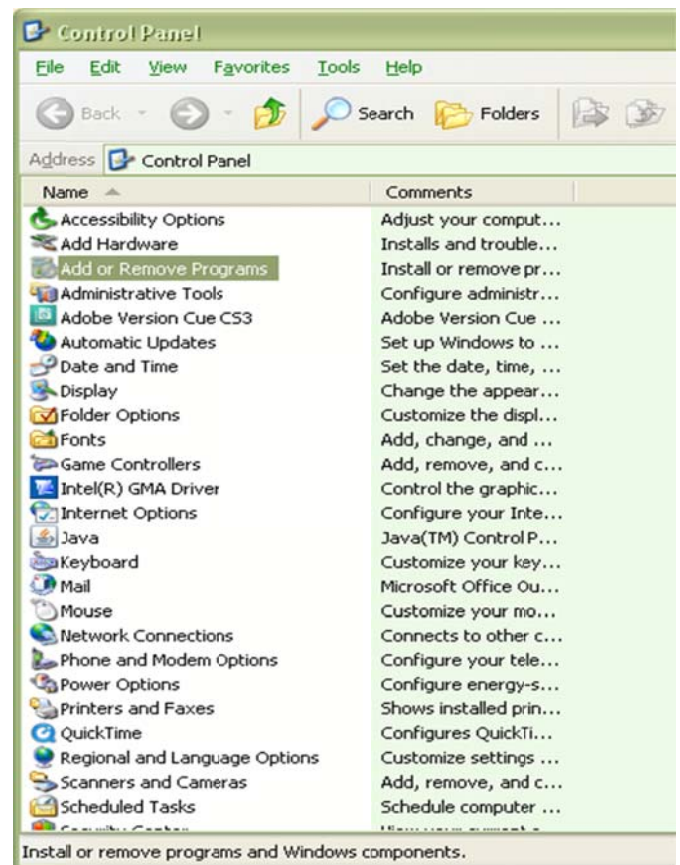
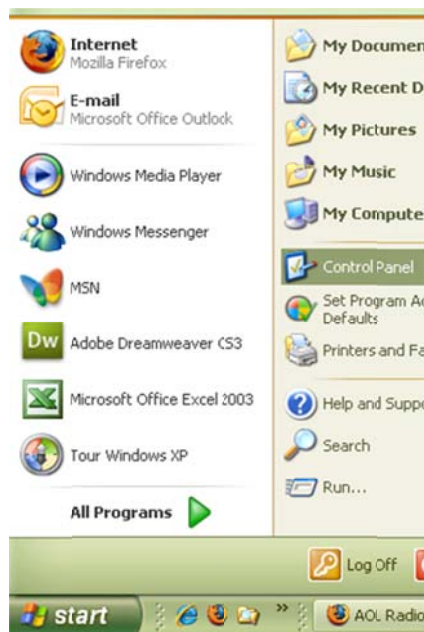
15. Follow the prompts and accept all default settings. The program will place an icon on your desktop called **Fish Condition**. This is the FPC32.net program, which includes the batch data entry and the fish condition touch screen.

NOTES:

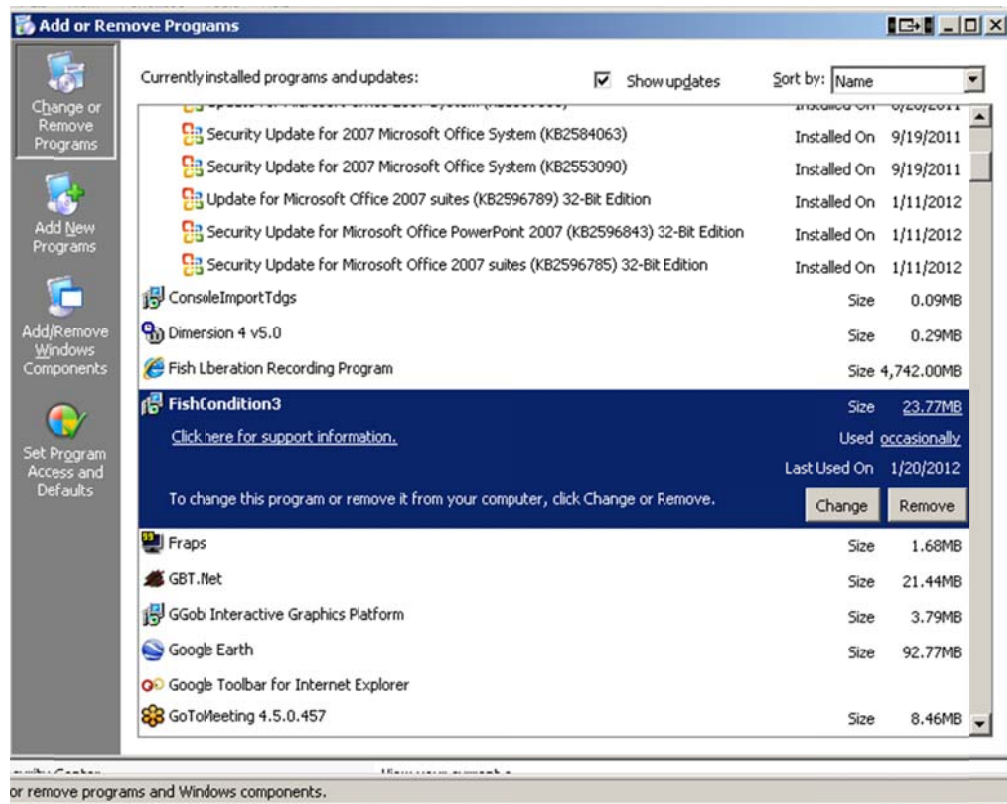
- The **.NET Framework 3.5** and the **Microsoft SQL 2005 Express** edition only need to be downloaded and installed once.
- If you already have **Windows XP** with **Service Pack 3** (or a newer version of **Windows**), you do not need to install **Microsoft .NET Framework 3.5**.

VI.C. Procedure to Install Newest Version of FPC32.net and Uninstall an Older Version

1. If you want to install a newer version of FPC32.net, you must first uninstall the old version. To uninstall the older version of FPC32.net, choose **Start | Settings | Control Panel**.



2. From within **Control Panel**, select **Add Remove Programs**.
3. From within **Add Remove Programs**, select **FishCondition3** and choose **Remove**.



4. A dialog box appears asking you to confirm the removal of **FishCondition3**, choose **Yes** to uninstall **FishCondition3**. Follow the prompts to uninstall the program.
5. After the program has been uninstalled, follow the instructions for installing FPC32.net (**Section VI.B** above).

NOTE:

- Uninstalling FPC32.net and installing a newer version can sometimes lead to an **Error** message stating that the **MS SQL Server Database** could not open and that the user should contact their system administrator. The FPC data staff has only encountered this issue once but has determined that is usually means that there is a problem with **Microsoft SQL 2005 Express**. If you encounter this problem, please call Lynnae Sutton at FPC and she will walk you through a procedure to properly uninstall **Microsoft SQL 2005 Express**. Uninstalling **Microsoft SQL 2005 Express** is not enough and will not remedy this problem.

VI.D. Procedure to Allow Full Control for Windows 7 Operating System

When FPC32.net is installed on a machine with Windows 7 operating system, the user may experience problems when trying to save new records. These problems may occur each time FPC32.net is uninstalled and reinstalled. The FPC staff has found that this is often a permissions issue that can affect whether SQL Express

database files can be written to by the current user. If this is the case, the user will typically get one of the following two error messages when trying to create a new batch.

The first error message appears to be an “Unhandled Exception Error” with a message that appears when the user attempts to save a new record. This error message states something to the effect of:

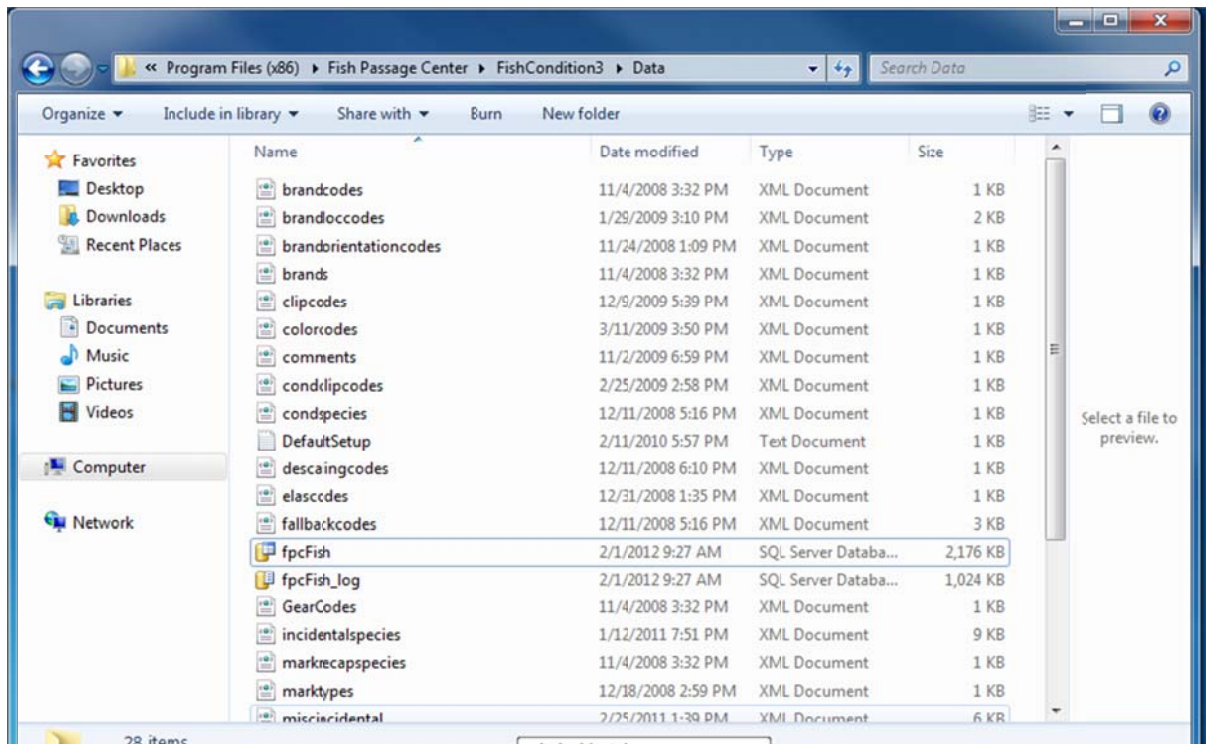
C:\Program Files (x86)\Fish Passage Center\FishCondition3\Data\fpcFish.dbf is read only.

A similar error may occur when starting the program after it is installed or reinstalled. This error states:

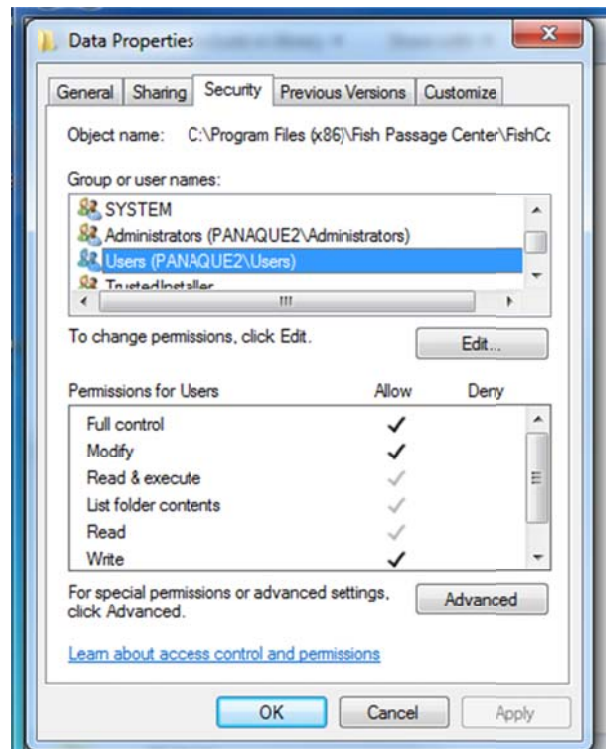
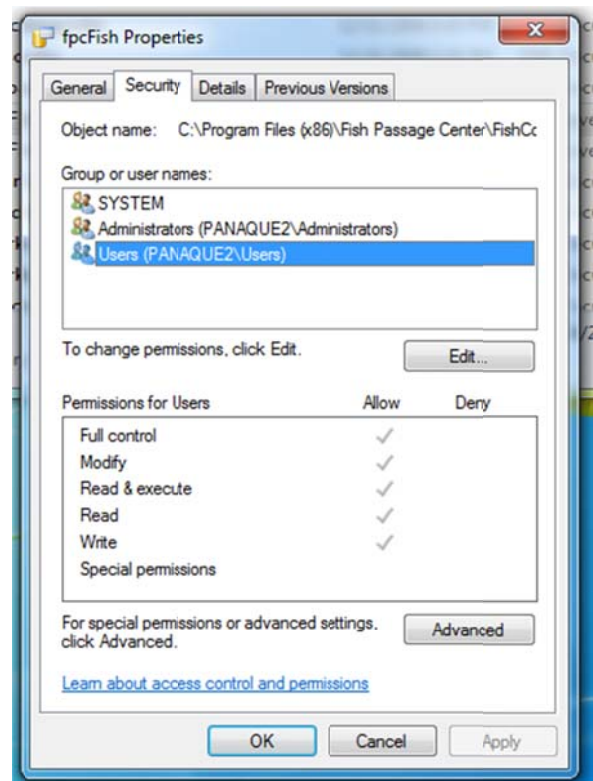


Below is a brief description of how to remedy both these errors.

1. Navigate to the directory: **C:\Program Files (x86)\Fish Passage Center\FishCondition3\Data**




2. Right-click on the file named **fpcFish.mdf** and select **Properties**. This will open the **fpcFish Properties** dialog box.
3. Click on the **Security** tab and choose **Users** among the list of **Group or User Names**
4. Once **Users** has been selected, look to see if **Full Control** has a check mark next to it in the list of **Permissions for Users**.
5. If it does NOT, select the **Edit** button. Select **Users** again and check the **Full Control** box. Click **Apply** and then **OK**.
6. Navigate to the directory:
C:\Program Files (x86)\Fish Passage Center\FishCondition3\Data
7. Right-click on the file named **fpcFish_log.LDF** and select **Properties**. This will open a dialog box titled **Data Properties**.
8. Click on the **Security** tab and choose **Users** among the list of **Group or User Names**
9. Once **Users** has been selected, look to see if **Full Control** has a check mark next to it in the list of **Permissions for Users**.
10. If it does NOT, select the **Edit** button. Select **Users** again and check the **Full Control** box. Click **Apply** and then **OK**.

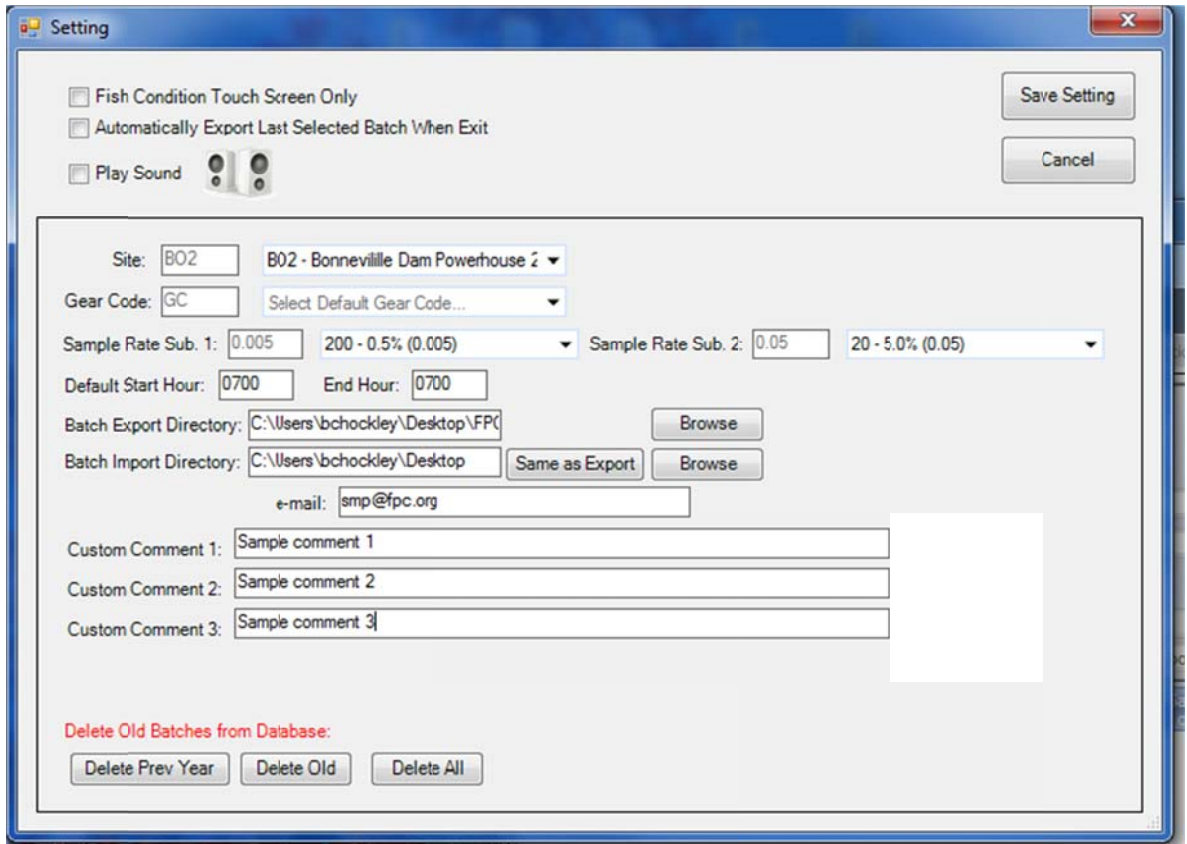


VII. Overview of FPC32.NET Program

VII.A. Running the FPC32.net Program and Select Settings

1. Once FPC32.net is installed an icon will appear on your desktop. Double-click on the **FishCondition** icon on your computer desktop. 
2. This opens the program. By default, the program is set to open to the **Batch Data Entry Screen** and an icon is placed in your system tray (lower right hand corner). Right-click on the **FPC32.net/Fish Condition** icon in the system tray and choose **Setting**. The setting dialog box appears. From this dialog box, you can choose whether you want the **Fish Condition Touch Screen** as the primary data entry screen. Computers located in the wet lab should be set to have the **Fish Condition Touch Screen** as the primary data entry screen upon opening the program. Computers located in the office should be set to have the **Batch Data Entry Screen** as the primary data entry window upon opening the program.

To make the **Fish Condition Touch Screen** the primary entry screen, select the **Fish Condition Touch Screen Only** checkbox (see figure below). Computers in the wet lab should be configured in this manner.



Setting

☐ Fish Condition Touch Screen Only

☐ Automatically Export Last Selected Batch When Exit

☒ Play Sound

Save Setting

Cancel

Site: B02 B02 - Bonneville Dam Powerhouse 2

Gear Code: GC Select Default Gear Code...

Sample Rate Sub. 1: 0.005 200 - 0.5% (0.005) Sample Rate Sub. 2: 0.05 20 - 5.0% (0.05)

Default Start Hour: 0700 End Hour: 0700

Batch Export Directory: C:\Users\bchockley\Desktop\FPC Browse

Batch Import Directory: C:\Users\bchockley\Desktop Same as Export Browse

e-mail: smp@fpc.org

Custom Comment 1: Sample comment 1

Custom Comment 2: Sample comment 2

Custom Comment 3: Sample comment 3

Delete Old Batches from Database:

Delete Prev Year Delete Old Delete All

3. Regardless of which computer you are configuring, the **Settings** dialog box can also be used to set many of the default settings for SMP sites, including: **Site**, **Gear Code**, **Sample Rate(s)**, **Start Hour**, and **End Hour**.
 - i. **Site**: enter your site in the Site box by choosing a value from the **Site Code** drop down list.
 - ii. **Gear Code**: enter a default gear code by selecting a value from the **Default Gear Code** drop-down menu. A gear code of **MT** will not be allowed at the dams, and a gear code of **GC** will not be allowed at the traps.
 - iii. **Sample Rate(s)**: enter the default sample rates for your site and sub-batches, by choosing a value from the **Select Default Sample Rate** drop-down menu for Sub-batch 1 and Sub-batch 2. Sample rates for additional sub-batches will be entered later in the data entry process. A sample rate of greater than 1 and less than 0 will not be allowed.
 - iv. **Start and End Hour**: enter the default start and stop hours, in military time, ranging from 0000 to 2400.
 - v. **Trap Location**: if you are at a trap location, the trap location field appears in the site configuration screen, otherwise it does not.
4. The **Batch Export Directory** button is used to specify where your batch records (i.e., .XML file) will be stored on your PC. Use the **Browse** button to browse to the directory where you want these files to be saved.

NOTE: Regardless of whether the wet lab or office computer is being used to generate the XML file, the file is named in the same convention. It is imperative that the sites recognize this and do not confuse the two files.

The file that is generated by the wet lab computer can be renamed if site personnel choose (see **Section VI.B.2** below). The XML file that is generated by the office computer is the only file that will be processed by the FPC (see **Section VI.K** below).
5. The **Batch Import Directory** button is used to specify which directory **FPC32.net** will look in for XML files to be imported. If you want to use the same directory as the Batch Export, press the Same as Export button. Otherwise, use the **Browse** button to browse to the directory where you want these files to be imported from.
6. FPC32.net has built-in sounds that prompt users when certain functions have been performed or need attention. To hear these messages, the **Play Sound Checkbox** must be checked.

NOTE: to hear messages, speakers need to be connected to the computer.
7. If desired, sites can have their batch files (i.e., XML files) sent directly to FPC upon completion. To do this, site personnel must enter smp@fpc.org in the **e-mail** dialog box in the settings screen. It is NOT mandatory that sites do this.
8. FPC32.net allows for up to three user defined comments that can be incorporated in the **Comments2** drop-down menu of the **Catch** data entry tab. These comments are labeled as **Custom Comment 1**, **Custom Comment 2**, and **Custom Comment 3** in the **Setting** screen. If you have a comment that you want to enter repeatedly (that is not already in the drop-down menu) you can type that comment in one of these three text boxes.

Any text that is entered into these text boxes will automatically show up in the **Comment2** drop-down menu.

9. The **Delete Prev Year** and **Delete Old** buttons delete the batches stored in the local database (except the current day's batch). ***These buttons should only be used to clean the database.*** The **Delete All** button deletes all of the records in the local database.
10. Once you are finished with the **Settings** dialog box, choose **Save Setting** to save the settings you have entered. A dialog box appears prompting the user to restart the application for the setting changes to take effect. Select **Yes** and the application will Exit.

VII.B. Entering Fish Condition Data Via the Touch Screen

Species, **Length**, and **Sub-batch** data are required in the Fish Condition touch screen in order for records to be saved successfully. **Weight** is not required, however, some of the sites collecting fish condition data will collect weight as a part of the fish condition dataset (except for incidental species).

By default, the Sub-batch number on the first record is set to 1. To change sub-batch for the first record press the **Sub-batch** button as many times as is necessary to get to the desired sub-batch number. If the sub-batch number is incorrect, choose **Clr. Sub-batch**. The sub-batch number is carried forward from the previous record until it is changed. To enter a Tank, press the appropriate **Tank** button (either **Tank A** or **Tank B**). The tank letter is carried forward to the next record from the previous record until it is changed by the user. Sites that do not have separate tanks will not see a Tank button. To enter a Species and Clip type, choose the appropriate **Species-Clip** button. For example, CH1 is for unclipped yearling Chinook, CH1-AD is for an adipose fin clipped yearling Chinook. If the species is an incidental species choose **Miscellaneous Incidental Species** and choose the appropriate button from the pop-up menu.

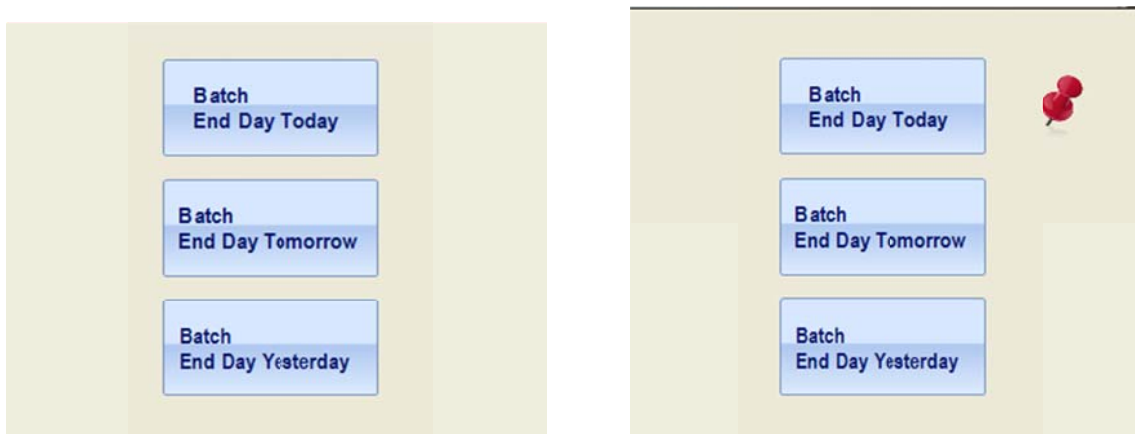
To enter specific fish condition data, press the appropriate button on the touch screen. For a detailed description of each of these buttons and what types of data should be entered, see **Section VIII.H** below. The data are saved to the database behind the touch screen and appear on the bottom left corner of the touch screen. **Most of the buttons are toggle buttons, which means that pressing the button once adds the selected condition to the fish record and pushing the same button again removes the condition from the fish record. There are some buttons where only one choice can be selected. These include: *Species or Species Clip, Special Species, Descaling, and Elastomer Tag Orientation/Color buttons.***

VII.B.1. Brief Overview of Steps to Entering Fish Condition Data via the Fish Condition Touch Screen

1. To enter fish condition data with the Fish Condition touch screen, double-click on the **FishCondition** icon on the desktop on the wet lab computer. A dialog box appears with three buttons. The **Batch End Day Today** button

creates a batch with the end date matching today's date, the **Batch End Day Tomorrow** button creates a batch with the end date matching tomorrow's date, and the **Batch End Day Yesterday** button creates a batch with the end date matching yesterday's date. The **Batch End Day Tomorrow** button should only be used if a sample is being worked up early. The **Batch End Day Yesterday** button should only be used if a sample is being worked up after being held for 24-hours. Click on one of these buttons to create a new batch.

If a batch already exists in the local database with a particular "**Batch End Day**", a pushpin icon appears next to the corresponding "**Batch End Day**" button.



L-Blue	L-Red	L-Green	L-Orange	L-Yellow	L-Pink	L-Purple	L-Other	Gen. Comments	Clr. Gen. Comments
R-Blue	R-Red	R-Green	R-Orange	R-Yellow	R-Pink	R-Purple	R-Other	Subbatch	Clr. Subbatch
Fungus	Columnaris	BID	Parasite	Deformity	Other		Special Comments	Tank A	Tank B
Head Inj.	Eye Inj.	Opirc.	Body Inj.	Fin Inj.	Eye Hemm.	Pop Eye	Fin Hemm.	Pink Fin	Fin Discol.
Partial Descale	Descale	Descale Prtd.			Bird	Fish	Lamprey		
Clr. Mark	LV	RV	CWT			Enter Weight	Clr. Weight	Enter Length	Clr. Length
CH1-AD	CH0-AD	ST-AD	CO-AD	SO-AD	HO	EF			
CH1	CH0	ST	CO	SO	LF			Misc. Incidental Species	

Tank A and None Clip/Uncip Tally:

CH1: 0 / 0

CH0: 0 / 0

ST: 0 / 0

CO: 0 / 0

SO: 0 / 0

Total: 0 / 0

Tank B Clip/Uncip Tally:

CH1: 0 / 0

CH0: 0 / 0

ST: 0 / 0

CO: 0 / 0

SO: 0 / 0

Total: 0 / 0

Special Species Tally:

Tank: A B None

Total Ho: 0 0 0

Total EF: 0 0 0

Total LF: 0 0 0

Total Incidental: 0

Total Sampled: 0

X Please enter Tank/Trap

Tank/Trap: ● Species: S. Species: Clip Code:

Elast: Color: CWT: Gen. Comment:

Predator: Spec. Comment:

Injury: Weight:

Other cond.: Length:

Disease:

Site: LGS Batch: 10044 2/13/2010 S/batch: 1 Sequence: 1

7	8	9	CE
4	5	6	.
1	2	3	0

Save/New Next Prev

Cancel Exit Panel Export

Touch screen for LGR, LGS, and LMN for 2013

Tank A or None Clip/Unclip Tally:

CH1:	8	/	0
CH0:	12	/	22
ST:	3	/	2
CO:	0	/	2
SO:	1	/	4
/ AB: 0 AS: 0			
/ AP: 0 MP: 1			
Total:	24	/	31

Tank B Clip/Unclip Tally:

CH1:	13	/	7
CH0:	12	/	9
ST:	3	/	3
CO:	0	/	11
SO:	4	/	9
/ AB: 0 AS: 0			
/ AP: 1 MP: 1			
Total:	32	/	41

Special Species Tally:

Tank: A B None			
Total Ho:	0	0	0
Total EF:	0	1	0
Total LF:	0	0	0
Total Incidental:	3		
Total Sampled:	131		

Form Fields:

Tank/Trap: **B** Species: **AP** S. Species: Clip Code:

Elast: Color: CWT: Gen. Comment:

Spec. Comment: Predator: Weight: Length: **100**

Disease: Site: **MCN** Batch: **11153** 2/3/2012 S/batch: **1** Sequence: **131**

Buttons: 7 8 9 CE New Edit Delete

4 5 6 Save (Cond) Next Prev

1 2 3 0 Cancel Exit Panel Export

Touch screen for BON, JDA, and MCN for 2013 (incorporates condition monitoring for lamprey juveniles). Note: BON and JDA screen does not have Tank B Clip/Unclip Tally

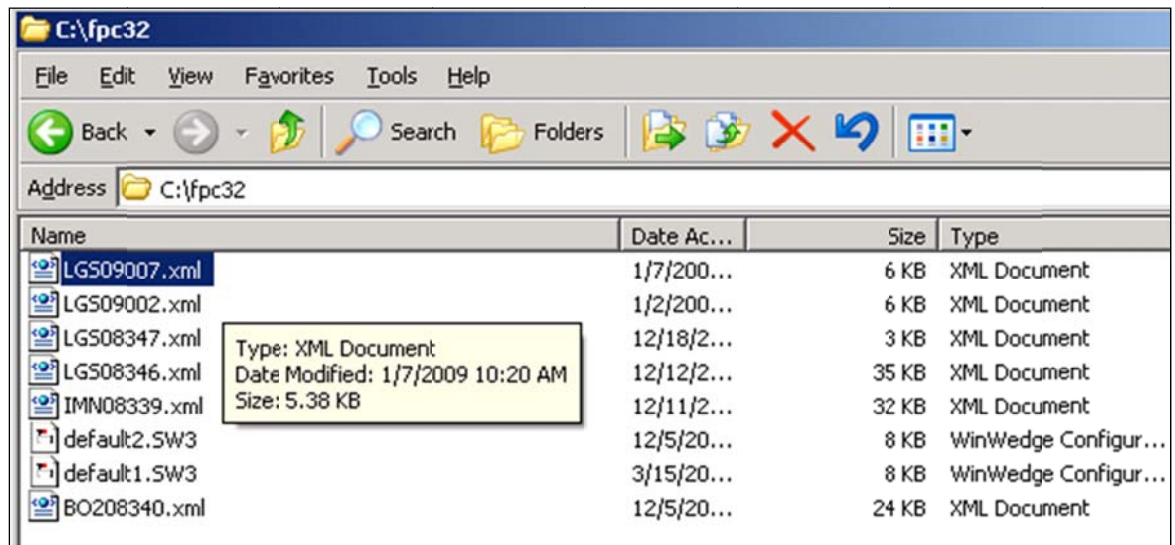
2. The Fish Condition touch screen then appears. The background panel appears gray until you select **New**.
3. Select **New** to enter a new fish condition record. The background panel turns white, meaning that the computer will accept data. The **New** button disappears and a **Save/New** button appears. If the background panel is gray, the computer will beep when you press a button because it is not in the **New** or **Edit** mode. In addition, the **Species**, **Weight**, and **Length** fields in the lower left hand corner are highlighted in yellow. This allows to user to more clearly see when these data are entered into the program.
4. Turn **on** the scale and add the tray (the scale automatically tares or calibrates to compensate for the weight of the tray), place the fish in the tray, and press the **Print** button on the scale.
 - It is important that you press the **Print** button on the scale only once
 - Once a weight has been entered, the weight field will turn from yellow to white and the corresponding weight will appear.
 - If this weight is incorrect, press the **Clear Weight** button on the touch screen and then press the **Print** button on the scale
5. Enter the fish length using the touch screen number pad. Using the number pad on the touch screen automatically shifts the focus to the length field.
 - Once a length has been entered, the length field will turn from yellow to white and the corresponding length will appear.
 - If this length is incorrect, press the **Clear Length** button on the touch screen and then re-enter the correct length

6. Press the appropriate **Species**, **Clip**, and **Other Condition** buttons.
 - Once a species has been selected, the species field will turn from yellow to white and the corresponding species code will appear
7. For those sites with tanks, the **Please Enter Tank/Trap** warning will disappear once a tank is chosen. Records cannot be saved until a tank is chosen.
8. If a comment needs to be entered, press the **General Comment** button and type the comment using the touch screen keyboard pop-up. *The user can enter up to two comments or codes in this field separated by a semicolon.*
9. Press **Save/New** to save the individual fish record. The **Save/New** button also automatically starts a new record for the next fish.
 - Follow steps 4 through 8 for each subsequent fish in the condition sample. **NOTE: The scale will occasionally need to be zeroed between fish by pressing the Tare button.**
10. Once the last fish has been entered and the **Save/New** button has been pushed, push the **Cancel** button to end data entry

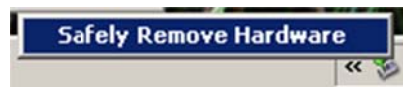
VII.B.2 - Exporting Daily Fish Condition Records from the Wet Lab Computer:

Typically, condition records are entered on the wet lab computer and the batch records are entered on a different computer in the office. Therefore, the daily condition records must be saved to an .XML file on the wet lab computer which is then imported into the office computer.

1. After completing the fish condition records, press the **Export** button on the lower right corner of the touch screen. This action creates an .XML file for the current batch that contains all of the fish condition records. This file is saved in the location specified under the **Setting** dialog box for this computer. FPC32.net uses the following naming convention for these exported .XML files: the first three characters are the site code, followed by a two digit year and three characters corresponding to the Julian day of the batch sample end date (1-366 days).
2. From the wet lab computer, open Windows Explorer and navigate to where the daily batch .XML files are saved.
3. Insert a portable storage device (e.g., thumb drive or floppy disk) into the wet lab computer. The computer may open a directory for the portable storage device.
4. Highlight the current day's batch or the batch you want to transfer to the office computer by clicking on the file name. Choose **Edit | Copy**.



5. Within Windows Explorer, navigate to the portable storage device and choose **Edit | Paste**. The current day's fish condition data are now stored on the portable storage device.
 - At this point, you can rename the fish condition XML file in order to avoid confusing it with the final batch file that will later be saved and sent to FPC.
 - To rename the fish condition XML file in the portable storage device, right click on the file and choose **Rename**. You must leave the first eight characters of the original file name intact and on the left hand side. For example, the file named **BO211100.XML** could be renamed **BO211100Cond.XML**.
6. The portable storage device needs to be removed from the wet lab computer. If the portable storage device is a thumb drive, right click on the **Safely Remove Hardware** icon in the system tray, and choose **Safely Remove Hardware**. A dialog box appears, highlight USB mass storage device and press **Stop**. Another dialog box appears, again highlight USB mass storage device and press **OK**. A system message appears stating that it is alright to remove the USB device. Remove the USB drive and go to the office computer.



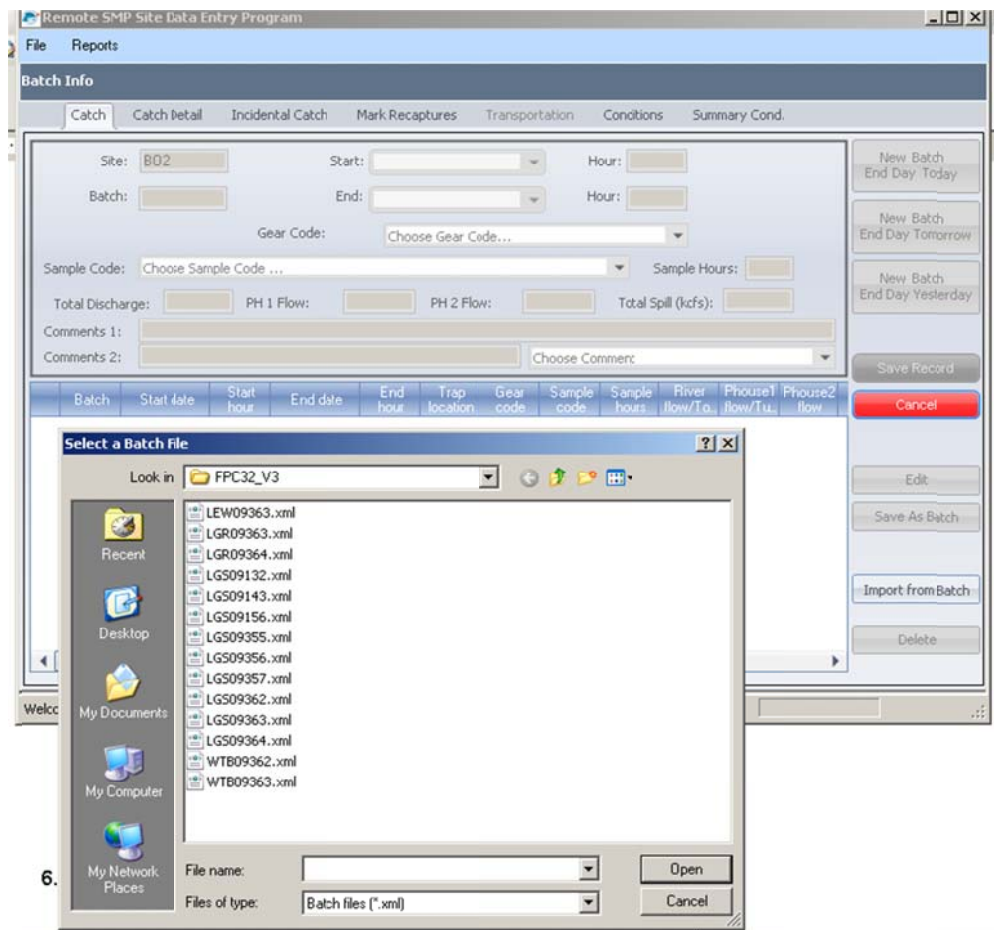
VII.C. Importing a Batch From the Condition Sample or Creating a New Batch

Creating a new batch in the **Catch Data Entry Tab Form** (i.e., **Main Form**) depends on whether condition data were collected or not. If condition data were collected (as described in **Section VII.B** above), the batch data from the condition sample is imported into the **Batch Data Entry Screen** (i.e., **Main Form**) for editing and entering non-condition data (see **Section VII.C.1** below). If no condition data were collected,

a new batch record can be created from within the **Main Form** (see **Section VII.C.2** below). ..

VII.C.1 - Importing Daily Fish Condition Records into FPC32.NET Main Form

1. From the office computer, double click on the **FishCondition** icon on the desktop. The office computer should be configured so that the **Main Form** opens by default. The **Main Form** window opens with the **Catch** tab forward.
2. Choose the button **Import from Batch**. An open dialog box appears. Navigate to your portable storage device and choose the batch you want to import data from. Click on **Open** (see picture below).



3. The **Main Form** displays the batch from which fish condition records were just imported in the **Catch** tab. Select the batch with the fish condition records you just imported by clicking on the record in the data grid. *Selected records have an arrow beside the batch.*
4. Choose **Edit**. This puts the selected record into the form at the top of the page, allowing the user to edit the data fields in the upper portion of the screen.
5. From this point, users should enter basic **Catch** data, including: 1) **Start Time**, 2) **End Time**, 3) **Gear Code**, 4) **Sample Code**, 5) **Sample Hours**, 6)

Total Discharge, 7) Powerhouse 1 flow, 8) Powerhouse 2 flow (if applicable), 9) **Total Spill**, and 10) any Comments (**Comments 1** or **Comments 2**) that pertain the entire batch.

Note: The start time, end time, and gear code will automatically set to the default values that were entered into the Settings dialog box.

- For a detailed description of each of these fields and what types of data should be entered, see **Section VIII.A.1** below
6. Choose **Save Record** button.
 7. Data entered into the **Catch** tab should be reviewed and validated at this point.
 8. Proceed to **Section VII.D**.

VII.C.2 - Creating a New Batch Record Directly from the FPC32.net Main Form (for sites where no condition data are collected):

1. From the office computer, double click on the **Fish Condition** icon on the desktop. The office computer should be configured so that the **Main Form** opens by default. The **Main Form** window opens with the **Catch** tab forward.
2. From within the **Catch** tab, choose **New Batch End Day Today** to create a new batch with the **EndDate** matching today's date. To create a new batch with the enddate matching tomorrow's date, select **New Batch End Day Tomorrow**. To create a new batch with the **EndDate** matching yesterday's date, select **New Batch End Day Yesterday**

The screenshot shows the 'Remote SMP Site Data Entry Program' window. The 'Batch Info' tab is selected, displaying various input fields for a new batch record. The 'Batch' field is populated with '09082'. The 'Start' and 'End' fields show dates and times. The 'Gear Code' is set to 'GC'. The 'Sample Code' is '1'. The 'Total Discharge' is '24', 'PH 1 Flow' is '122', 'PH 2 Flow' is '16.3', and 'Total Spill (kcf)' is '98'. The 'Comments' section has two empty text boxes. The bottom of the window features a table with columns: Batch, Start date, Start hour, End date, End hour, Trap location, Gear code, Sample code, Sample hours, River flow/Tu, Phouse1 flow/Tu, and Phouse2 flow. The table contains one row for batch 09082. The right sidebar has buttons for 'New Batch End Day Today', 'New Batch End Day Tomorrow', 'New Batch End Day Yesterday', 'Save Record', 'Cancel', 'Edit', 'Save As Batch', 'Import from Batch', and 'Delete'.

Batch	Start date	Start hour	End date	End hour	Trap location	Gear code	Sample code	Sample hours	River flow/Tu	Phouse1 flow/Tu	Phouse2 flow
09082	3/22/2009	0700	3/23/2009	0700		GC	1	24	122	16.3	98

- For all sites except **LEW** and **WTB**, the batch number and site are automatically generated based on the information selected in the **Settings** dialog box and by the current date on your computer. The

LEW and **WTB** sites will have to select the Site for which data are to be entered. To do this, select the **Site** from the **Site Drop-down menu** (located on the right-hand side).

3. From this point, users should enter the remaining **Catch** data, including: 1) **Start Time**, 2) **End Time**, 3) **Gear Code**, 4) **Sample Code**, 5) **Sample Hours**, 6) **Total Discharge**, 7) **Powerhouse 1 flow**, 8) **Powerhouse 2 flow** (if applicable), 9) **Total Spill**, and 10) any Comments (**Comment 1** or **Comment 2**) that pertain the entire batch.

Note: The start time, end time, and gear code will automatically set to the default values that were entered into the Settings screen.

4. Choose **Save Record**.
5. Proceed to **Section VII.D**.

VII.D. Entering Non-Condition Fish Data (Catch Detail)

If all fish sampled that day were condition fish (and no mortalities were encountered), you may skip this step and move onto **Section VII.E**. Otherwise, once the **Catch** data have been entered, the next step is to enter the non-condition sample data via the **Catch Detail** tab. To select the **Catch Detail** screen for data entry, first select the record for the batch you want to add data to by clicking on the batch record in the data grid at the bottom of the **Catch** screen. A selected record has an arrow beside it. Second, select the **Catch Detail** tab. For a detailed description of data entry fields in the **Catch Detail** tab, see **Section VIII.B** below.

Below is a brief overview of how to enter a single record of non-condition sample data:

1. From the **Catch Detail** tab click on the **New** button
2. Fill in the correct sub-batch and tank information for the record you wish to enter.
3. Choose the appropriate **Species**, **Age**, **Clip**, **Coded Wire Tag**, and Special **Species** information for the record you wish to enter
4. When entering the first record of a sub-batch, the program applies the default sample rate for that sub-batch. If this is not the sample rate that was used, you must change the sample rate/multiplier to the correct value. Use the **Multiplier** drop down menu to choose from the list of standard sample rates/multipliers. If a non-standard sample rate was used, you may enter this value directly into the **Sample Rate** field (this value must be between 0 and 1).
 - The sample rate for a single sub-batch is carried forward to the next record from the previous record until the sub-batch number is changed by the user.
 - Given this, it is critical that you verify that the sample rate for each sub-batch is correct before saving the first record of each sub-batch.**Section VIII.B** provides detailed information for correcting the sample rate if you find that the wrong sample rate was entered for a sub-batch.

5. Enter **Non-Cond. Sample Count**, **Num Exam for descaling**, **Num descaled**, **Sample Morts**, **Facility Morts**, **Research Morts**, and **PITTag Morts** (where appropriate).
 - When sample code is NOT GB, the field for **Num Exam for Descaling** will calculate automatically based on what is entered into the **Non-Cond. Sample Count** and **Sample Morts** fields for all species and special species combinations (except for lamprey juveniles and fry) using the following equation:
Num. Exam for Descaling = Non-Cond. Sample Count – Sample Morts
 This assumes that 100% of non-condition fish were examined for descaling. If this is not the case, you may over-ride the calculated value of **Num. Exam for Descaling** after entering the **Non-Cond. Sample Count** and **Sample Morts**.
 - ***Descaling is not assessed on GBT fish, lamprey juveniles, or fry, so the Num. Exam for Descaling for these records is assumed to be 0.***
6. When the entry is complete, choose **Save/New**. The **Save/New** button also automatically starts a new record for this batch.
7. Follow steps 4 through 6 for each subsequent record to be entered.
8. Once the last record has been entered and the **Save/New** button has been pushed, push the **Cancel** button to end data entry for this screen.
9. Once all non-condition records have been entered, these data should be validated from the hand logs by printing or viewing the **Daily Batch/Tank Report** and/or the **Lamprey Batch/Tank Report**. To view these reports, chose **Reports** and select **Daily Batch/Tank Report** and/or **Lamprey Batch/Tank Report**. A separate report can be generated for each sub-batch that was entered. It's best to do this level of validation prior to incorporating the condition data into the **Catch Detail** tab via promotion (see **Section VII.H**).

Note: *There are several fields on the **Catch Detail** tab that are inactive (i.e., grayed out). These are fields that are either calculated (e.g., **Est. Collection**, **Cond. Collection**) or are incorporated into the batch upon promotion of the Condition Data. (e.g., **Cond. Sample Count**, **Num. Cond. Exam for Descaling**, etc.).*

Remote SMP Site Data Entry Program

File Reports

Catch Detail

Catch Catch Detail Incidental Catch Mark Recaptures Transportation Conditions Summary Cond.

Site: LGS Sub Batch: Sequence: 3 Tank/Trap: ☐ A ☐ B ☐ None

Batch: 11026 Species Code: CH - Chinook Age Code: ☒ 1 ☐ 0

Fin Clipped: ☐ Y ☒ N Cwt: ☐ Y ☒ N ☐ N/A Special Species: - n/a

Gear Code: GC - Gatewell Collection System Multiplier: 5 - 20.0% (0.2) Sample Rate: 0.2

Non-Cond. Sample Count: 0 Est. Collection: 0 Cond. Sample Count: 0 Cond. Collection: 0

Num. exam for descaled: 0 Num. descaled: 0 Num. Cond. exam for descaled: 0 Num. Cond. descaled: 0

Total Sample Count: 0 Total Collection: 0 Total Exam. for descaled: 0 Total Num. Descaled: 0

Sample Morts: 0 Facility Morts: 0 Research Morts: 0 PITTag Morts: 0

Subbat.	Sequen.	Tank	Species Code	Age Code	Special specie.	CWT	Clip	Gear code	Multipli.	Sample rate	Sample count	Est. Co
2	2 B	AP				N	GC	5	0.2	2		
2	1 B	CO			N	N	GC	5	0.2	5		
1	2 A	AB				N	GC	20	0.05	2		
1	1 A	CH	1		N	N	GC	20	0.05	10		

Record Count: 4

New Save Cancel Edit Delete

VII.E. Entering Incidental Catch Data

Once the **Catch Detail** data have been entered, the next step is to enter the non-condition incidental species data via the **Incidental Catch** tab. For a detailed description of data entry fields in the **Incidental Catch** tab, see **Section VIII.C** below.

To create a new record in **Incidental Catch** click on the **New** button to add a record. Only incidentals collected as part of the non-condition data are entered into the **Incidental Catch** tab at this point. Data to enter for each incidental species include: 1) **Species**, 2) **Sample Count**, and 3) **Sample Morts**. When the entry of a single species is complete, choose **Save Record**.

Note: Cond. Count will be filled in automatically when Condition Data are incorporated into the batch (see **Section VII.H**).

Incidental Catch data should be validated by printing or viewing the **Incidental Catch** summary report. To view this report, chose **Reports** and select **Incidental Catch**. If Condition Data include incidental species, this validation step should be done prior to incorporating the condition data into the **Incidental Catch** tab via promotion (see **Section VII.H**).

VII.F. Entering Mark/Recapture Data

Once the **Incidental Catch** data have been entered, the next step is to enter the non-condition **Mark/Recapture** data by selecting the **Mark/Recaptures** data entry tab. For a detailed description of data entry fields in the **Mark/Recaptures** tab, see **Section VIII.D** below.

To create a new record in **Mark/Recaptures** click on the **New** button to add a record. Only mark/recapture data for non-condition fish are entered into the **Mark/Recaptures** tab at this point. Mandatory data for each mark/recapture record include: 1) **Tank** (where applicable), 2) **Species**, 3) **Age**, 4) **Mark Type**, 5) **Tag Color**, 6) **Clip Code** (*chose N/A if fish is unclipped and not CWT*), and 7) **Tally Total**.

Location for Elastomer Tags is part of the **Mark Type** code, so **Tag/Brand Loc** is **NOT** required for Elastomer Tags. **Tag/Brand Loc**, **Brand Code**, **Brand Orientation**, **Tag Number**, **Supplemental Code**, and **Length** are **NOT** mandatory.

When the entry is complete, choose **Save Record**. **Mark/Recapture** data should be validated by printing or viewing **Mark Recapture Summary Report**. To view this report, chose **Reports** and select **Mark Recapture**. If Condition Data include Mark/Recapture data, this validation step should be done prior to incorporating the condition data into the **Mark Recaptures** tab via promotion (see **Section VII.H**).

Note: *Cond. Count* and *Total Count* will be filled in automatically when Condition Data are incorporated into the batch (see **Section VII.H**).

VII.G. Validating Condition Data

Once the **Mark Recaptures** data have been entered, the next step is to validate the condition data by selecting the **Conditions** data entry tab. For a detailed description of data entry fields in the **Conditions** tab, see **Section VIII.F** below.

Validation of condition data can be done in two ways:

1. Individual fish condition records can be viewed for validation directly from the data grid in the **Conditions** tab. By clicking on the column header, records can be sorted for easier viewing. Sorting by multiple columns is also possible, simply hold the **Shift** key while selecting the sequence of columns you wish to sort by. If errors are found, records can be edited directly from the **Conditions** tab (see **Section VIII.F** for more details on editing and instructions on group editing).
2. Individual condition can also be viewed via the **Individual Fish Condition Report**. To validate condition data in this manner, choose **Reports** and select the **Individual Fish Condition Report** from the drop-down menu. This report may be reviewed or printed for validation. If errors are found, records can be edited directly from the **Conditions** tab (see **Section VIII.F** for more details on editing).

Remote SMP Site Data Entry Program

File Reports

Fish Condition

Catch Catch Detail Incidental Catch Mark Recaptures Transportation Conditions Summary Cond.

Site: LGS Sub Batch: 1 Species Code: CH1 Tank/Trap: A B None Cwt: Y N N/A

Batch: 11026 Sequence: 3 Species: Choose Species Code... Special Species: -n/a

Miscellaneous Incidental: Choose Species Code...

Mark Type: -N/A Elast. Code: -N/A Color Code: -N/A

Decaling: -N/A Gen. Comment:

Weight: Length:

Predator: ☐ Bird ☐ Fish ☐ Lamprey

Injury: ☐ Head ☐ Eye ☐ Operc. ☐ Body ☐ Fin

☐ Pop Eye ☐ Fin Hemm. ☐ Pink Fin ☐ Fin Discol. ☐ Eye Hemm.

Disease: ☐ Fungus ☐ Columnaris ☐ BKD ☐ Parasite ☐ Deformity ☐ Other

Special Comment:

Subbat.	Sequen.	Tank	Edit	Species	Clip Code	CWT	Special species	Elast	Color	Weight	Length	Descal
1	2	A	<input type="checkbox"/>	CH1		N				21.2	125	
1	1	A	<input type="checkbox"/>	ST	AD					24.6	235	

Record Count: 2

Save/New Cancel Edit Delete Select All Clear All

VII.H. Promoting Condition Data into the Batch

Once the **Condition** data have been validated and edited (when applicable), the next step is to incorporate condition sample data into the batch (**Catch Detail**, **Incidentals**, **Mark/Recaptures**) by selecting the **Summary Cond.** data entry tab. For a detailed description of the **Summary Cond.** tab and its functions see **Section VIII.G** below.

To incorporate condition sample data into the batch, select the **Summary Cond.** tab and click on the **Promote All** button. When condition sample data are incorporated into the **Catch Detail** tab, the sample counts for condition fish will appear in the **Cond. Sample Count** column.

Note: If all fish sampled were condition fish, before promoting, the user must first enter the sample rate for each sub-batch that was entered using the touch screen. The default sample rate(s) are listed but need to be checked and corrected (when applicable). To do this, right click in the **Sample Rate** cell in the **Condition SubBatches** box at the top of the **Summary Cond** screen (**A in figure below**). This allows you to manually enter the sample rate for each individual sub-batch that was entered into the touch screen. Once this is done, click on the **Promote All** button. When condition sample data are incorporated into the **Catch Detail** tab, the sample

counts for condition fish will appear in the grayed area of **Catch Detail** tab and the **Cond. Sample Count** column of the data grid (Red boxes in figure below).

Remote SMP Site Data Entry Program

File Reports

Summary Fish Condition

Catch Catch Detail Incidental Catch Mark Recaptures Transportation Conditions Summary Cond.

Site: LGS Catch Detail Sub Batches: Sub... Sample R... Ge...

Batch: 09138

Conditions Sub Batches:

Subbatch	Sample Rate	Editable
2	0.005	No
1	0.01	No

Promote All

Subbat	Tank	Species	Clip Code	CWT	Special species	Elast	Color Code	Avg length	Num samp	Eye	Pop Eye	Ops
1	A	CH1						120	10	0	0	0
1	A	CH1		Y				141	2	0	0	0
1	A	CH1			LF			114	1	0	0	0
1	A	CH1	AD					137	104	3	0	0
1	A	CH1	AD		LF			140	7	0	0	0
1	A	ST						178	4	0	0	0
1	A	ST	AD					184	13	0	0	0
2	B	CH0						65	1	0	0	0
2	B	CH1						112	1	0	0	0
2	B	CH1		Y				136	1	0	0	0
2	B	CH1	AD					138	20	0	0	0
2	B	CO						132	1	0	0	0

Record Count: 15

Remote SMP Site Data Entry Program

File Reports

Catch Detail

Catch Catch Detail Incidental Catch Mark Recaptures Transportation Conditions Summary Cond.

Site: LGS Sub Batch: Sequence: 3 Tank/Trap: A B None

Batch: 11026 Species Code: CH - Chinook Age Code: 1 0

Fin Clipped: Y N Cwt: Y N N/A Special Species: n/a

Gear Code: GC - Gatewell Collection System Multiplier: 5 - 20.0% (0.2) Sample Rate: 0.2

Non-Cond. Sample Count: 0 Est. Collection: 0 0

Num exam for descaled: 0 Num descaled: 0

Total Sample Count: 0 Total Collection: 0

Sample Morts: 0 Facility Morts: 0 Research Morts: 0 PITTag Morts: 0

Cond. Sample Count: 0 Cond. Collection: 0 0

Num. Cond. exam for descaled: 0 Num Cond. descaled: 0

Total Exam. for descaled: 0 Total Num. Descaled: 0

Subbat	Sequen	Tank	Species Code	Age Code	Special species	CWT	Clip	ond. Count	Cond. Coll.	Total Sample	Total collecti
1	3	A	ST				Y	1	20	1	20
2	2	B	AF				N	0	0	2	10
2	1	B	CC			N	N	0	0	5	25
1	2	A	AE				N	0	0	2	40
1	1	A	CH	1		N	N	1	20	11	220

Record Count: 5

IMPORTANT: The **Cond. Sample Count**, **Num Cond. Exam.**, **Num Cond. Descaled**, and **Cond. Collection** fields cannot be edited. If an error was made in the fish condition records, these data need to be edited in the **Conditions** tab and then re-promoted (from **Summary Cond.**) for edits to take effect.

VII.I. Entering Transportation Data

Once the **Condition** sample data have been incorporated into the batch, the next step is to enter the **Transportation** data via the **Transportation** tab. For a detailed description of data entry fields in the **Transportation** tab, see **Section VIII.E** below.

There are two ways to enter data using the **Transportation** tab. The first is manual data entry where each **Tank**, **Species**, **Age**, **Clip**, **CWT**, and **Special Species** (EF and Fry) combinations from that day's batch are manually entered, one-by-one.

Lamprey Juveniles are NOT to be entered into the Transportation Data Entry Tab. The other is to import the **Tank**, **Species**, **Age**, **Clip**, **CWT**, and **Special Species** (EF and Fry) combinations from the **Catch Detail** data entry screen, using the **Import** button. For a more detailed discussion of each of these methods, see **Section VII.I.1** and **Section VII.I.2** below.

Regardless of which method you chose to use, you must know what your collection counts were for each **Tank**, **Species**, **Clip**, **CWT**, and **Special Species** code (EF and FR) combination. This information is summarized for the entire batch in the **Daily Batch/Tank Report**, which can be generated by selecting **Reports** and choosing **Daily Batch/Tank Report (All – Subbatches)** from the drop-down menu. This report should be printed. The data that are to be entered into the **Transportation** tab can be found in the rows labeled “**Total Collection**” and “**Sample, Facility, Research Morts**” (i.e., mortalities) (see figures below).

NOTE: For each tank, all columns should be entered into the **Transportation** tab as separate records. Holdovers and Lyons Ferry fish are included in the UC, CWT, or CL columns for Chinook 1.

Due to the collection of fish for NOAA marking, LGR is the only transportation site that cannot enter EF Steelhead separately. Unclipped steelhead should be entered as a single record at LGR.

Subbatch : All Sample Start Date : 4/15/2009 Sample Start Hour : 0700
 Sample End Date : 4/16/2009 Sample End Hour : 0700
 Number of Hours Sampled: 24
 Sample Code : 1 Avg. Total Discharge: 0 kds Avg. Total Spill: 0 kds
 Total Turbine Discharge: 0 kds

Comments : START USGS COLLECTION. 47 HCH-1, 1 WCH-1, 17 HST, 14 WST bypassed to researchers
 Condition and non-condition sample. ALL fish bypassed.

Tank A	Chinook 1			Chinook 0				Steelhead				Coho				Sockeye			Total
	UC	CWT	CL	UC	CWT	CL	Fry	UC	EF	CWT	CL	UC	CWT	CL	Fry	UC	CWT	CL	
Non-Cond. Sample Count	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exam Desc (Non-cond.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-cond. Descaled	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Condition Sample Count	16	7	59	0	0	0	0	5	0	0	1	0	0	0	0	1	0	0	89
Exam Desc (Condition)	16	7	59	0	0	0	0	5	0	0	1	0	0	0	0	1	0	0	89
Condition Descaled	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Sample Count	16	7	59	0	0	0	0	5	0	0	1	0	0	0	0	1	0	0	89
Total Collection	800	350	2950	0	0	0	0	250	0	0	50	0	0	0	0	50	0	0	4450
Sample Morts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Facility Morts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Research Morts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PIT Tag Morts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Num Bypassed	800	350	2950	0	0	0	0	250	0	0	50	0	0	0	0	50	0	0	4450
Num Trucked	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Num Barged	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Descaling Pctg. (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

VII.I.1 – Manual Entry of Transportation Data

- To create a new record in the **Transportation** data entry screen click on the **New** button to add a record.
- Enter the **Tank**, **Species**, **Clip**, **CWT**, and **Special Species** code (EF and FR) combination for the record you wish to create
- Enter the **Num. Bypassed**, **Num. Trucked**, and/or **Num. Barged** for each new record. These numbers are derived from the “**Total Collection**” minus total “**mortalities**” in the **Daily Batch/Tank Report (All – Sub-batches)**.
 - In the case when two day’s samples are being transported together, the **Daily Batch/Tank Report (All – Sub-batches)** for each of these batches will have to be collectively entered in to the **Transportation** tab.
- To validate these data, re-run the **Daily Batch/Tank Report (All – Sub-batches)** and verify that the **Num. Bypassed**, **Num. Trucked**, and **Num. Barged** are correct.

Remote SMP Site Data Entry Program

File Reports

Transportation

Catch Catch Detail Incidental Catch Mark Recaptures Transportation Conditions Summary Cond.

Site: LGS Sequence: Tank/Trap: ☐ A ☐ B ☐ None

Batch: 09138 Species Code: Choose Species Code... Age Code: ☐ 1 ☐ 0

Fin Clipped: ☐ Y ☐ N Cwt: ☐ Y ☐ N ☐ None Special Species: Choose Special Species Code...

Num Bypassed: Num Trucked: Num Barged:

Seq.	Tank	Species Code	Age Code	Clip	Cwt	Special Species	Num Bypassed	Num Trucked	Num Barged
1	B	ST		Y			0	0	
2		CH	1	Y			0	0	
3		ST		Y			0	0	
4	A	CH	1	N			0	0	
5	A	CH	1	N	Y		0	0	
6	B	CH	0	N			0	0	
7	B	CH	1	N			0	0	
8	B	CH	1	N	Y		0	0	
9	B	CO		N			0	0	
10	B	SO		Y			0	0	

Record Count: 19

New Save Record Cancel Import Edit Delete Refresh

VII.I.2 – Importing Data from Catch Detail for Transportation Data Entry Tab

- To import the different **Tank, Species, Age, Clip, CWT, and Special Species** (EF and Fry) combinations from the **Catch Detail** tab into the **Transportation** tab, push the **Import** button.
 - Only data in **Catch Detail** for that particular batch are imported. This means that additional **Tank, Species, Age, Clip, CWT, and Special Species** (EF and Fry) combinations from previous days may need to be entered, when every-other-day transportation is in place.
 - Only target salmonid species are imported from **Catch Detail**. **Lamprey juveniles are NOT to be entered into the Transportation tab.**
 - If condition data have not been promoted to **Catch Detail**, these **Tank, Species, Age, Clip, CWT, and Special Species** (EF and Fry) combinations may not be present.
 - NOTE:** Eroded fin steelhead at LGR will be imported as Unclipped steelhead, as LGR cannot know how many EF steelhead were collected.
- Enter the **Num. Bypassed, Num. Trucked, and/or Num. Barged** for each **Tank, Species, Age, Clip, CWT, and Special Species** (EF and Fry) combinations. To do this, select each record and enter the corresponding **Num. Bypassed, Num. Trucked, and/or Num. Barged** for that record, followed by the **Save Record** button.
 - These collection counts can be found in the **Daily Batch/Tank Report**.

- To validate these data, re-run the **Daily Batch/Tank Report (All – Sub-batches)** and the **Lamprey Batch/Tank Report (All – Sub-batches)** and verify that the **Num. Bypassed**, **Num. Trucked**, and **Num. Barged** are correct.

VII.J. Validating Batch

The **Daily Batch/Tank Report** and the **Lamprey Batch/Tank Report** that were generated and printed for **Section VII.I** above can be used for final data validation. These reports summarize sample counts, descaling information, collection counts and mortality data for condition and non-condition fish, separately by tank. Validation from these reports can be done for a single sub-batch at a time or for all sub-batches combined. Validate non-condition data by comparing these reports to your hand logs, paying special attention to the sample counts, number examined for descaling, descaling, mortality counts, and flow/spill quantities. Holdovers and Lyons Ferry fish are included in the UC, CWT, or CL columns for Chinook 1.

If any changes need to be made, edit the records with incorrect data using FPC32.net. If data have been edited, run the **Daily Batch/Tank Report** and **Lamprey Batch/Tank Report** again. Once all of the data are entered and validated, follow the **End and Send (Section VII.K)** instructions below.

Page 1

Site LGS

FISH PASSAGE CENTER

DAILY BATCH/TANK REPORT Batch # 09106

Date 4/16/2009 3:36:39 PM

from File: LGS09106.XML

Subbatch : 1

Sample Start Date : 4/15/2009

Sample End Date : 4/16/2009

Sample Start Hour : 0700

Sample End Hour : 0700

Number of Hours Sampled: 24

Sample Code : 1

Avg. Total Discharge: 0 kcts

Avg. Total Spill: 0 kcts

Comments :

START USGS COLLECTION. 47 HCH-1, 1 WCH-1, 17 HST, 14 WST bypassed to researchers

Condition and non-condition sample. ALL fish bypassed.

Tank A

	Chinook 1			Chinook 0				Steelhead				Coho				Sockeye			Total
	UC	CWT	CL	UC	CWT	CL	Fry	UC	EF	CWT	CL	UC	CWT	CL	Fry	UC	CWT	CL	
Non-Cond. Sample Count	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exam Desc (Non-cond.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-cond. Descaled	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Condition Sample Count	16	7	59	0	0	0	0	5	0	0	1	0	0	0	0	1	0	0	89
Exam Desc (Condition)	16	7	59	0	0	0	0	5	0	0	1	0	0	0	0	1	0	0	89
Condition Descaled	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Sample Count	16	7	59	0	0	0	0	5	0	0	1	0	0	0	0	1	0	0	89
Total Collection	800	350	2950	0	0	0	0	250	0	0	50	0	0	0	0	50	0	0	4450
Sample Morts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Facility Morts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Research Morts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PIT Tag Morts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Descaling Pctg. (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

A separate report (**Special Species Daily Tank/Batch Report**) can be used to validate the entry of holdover and Lyons Ferry yearling Chinook data at the unclipped, clipped, and CWT level. Select **Reports** and choose **Special Species**

Daily Batch/Tank Report from the drop-down menu. This report summarizes sample counts, descaling information, collection counts and mortality data for condition and non-condition holdover and Lyons Ferry yearling Chinook, separately by tank. Validation from this report can be done for a single subbatch at a time or for all subbatches combined. Validate non-condition data by comparing this report to your hand logs, paying special attention to the sample counts, number examined for descaling, descaling, mortality counts, and flow/spill quantities.

Page 1
Site LGS FISH PASSAGE CENTER Date 1/23/2012 3:24:36 PM
SPECIAL SPECIES DAILY BATCH/TANK REPORT Batch # 11099
from File: LGS11099.XML

Subbatch : All
Sample Start Date : 4/6/2011 Sample Start Hour : 0700
Sample End Date : 4/9/2011 Sample End Hour : 0700
Gear Code : GC
Sample Code : 1
Number of Hours Sampled: 24
Avg. Total Discharge: 111.45 kcfs
Total Turbine Discharge: 76.73 kcfs
Avg. Total Spill: 34.09 kcfs
Comments :

Tank A	Chinook 1 HO				Chinook 1 LF				Grand Total
	UC	CWOT	CL	Total Ho	UC	CWOT	CL	Total LF	
Non-Cond. Sample Count	0	0	0	0	0	0	0	0	0
Exam Desc (Non-Cond.)	0	0	0	0	0	0	0	0	0
Non-Cond. Descaled	0	0	0	0	0	0	0	0	0
Condition Sample Count	0	1	0	1	0	0	0	0	1
Exam Desc (Condition)	0	1	0	1	0	0	0	0	1
Condition Descaled	0	0	0	0	0	0	0	0	0
Total Sample Count	0	1	0	1	0	0	0	0	1
Total Collection	0.0	20.0	0.0	20.0	0.0	0.0	0.0	0.0	20.0
Sample Morts	0	0	0	0	0	0	0	0	0
Facility Morts	0	0	0	0	0	0	0	0	0
Research Morts	0	0	0	0	0	0	0	0	0
PIT Tag Morts	0	0	0	0	0	0	0	0	0
Descaling Pctg. (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Tank B	Chinook 1 HO				Chinook 1 LF				Grand Total
	UC	CWOT	CL	Total Ho	UC	CWOT	CL	Total LF	
Non-Cond. Sample Count	0	0	0	0	0	0	0	0	0
Exam Desc (Non-Cond.)	0	0	0	0	0	0	0	0	0
Non-Cond. Descaled	0	0	0	0	0	0	0	0	0
Condition Sample Count	2	1	0	3	0	3	1	4	7
Exam Desc (Condition)	2	1	0	3	0	3	1	4	7
Condition Descaled	0	0	0	0	0	0	0	0	0
Total Sample Count	2	1	0	3	0	3	1	4	7
Total Collection	40.0	20.0	0.0	60.0	0.0	60.0	20.0	80.0	140.0
Sample Morts	0	0	0	0	0	0	0	0	0
Facility Morts	0	0	0	0	0	0	0	0	0
Research Morts	0	0	0	0	0	0	0	0	0
PIT Tag Morts	0	0	0	0	0	0	0	0	0
Descaling Pctg. (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

VII.K. End and Send

Once data have been validated, the next step is to print reports for your records and create an .XML file that will be sent to The Fish Passage Center.

1. Navigate to the **Catch** tab and click on **Save as Batch**

- This writes the data in the local database to an XML file in the directory specified in the **Settings** (see **Section VII.A**)
 - In an XML file already exists for that batch, you may be prompted with a message asking if you want to overwrite the existing batch. Select **Yes**.
2. End data entry each day by printing the **Daily Summary**, **Incidental Catch**, **Mark Recaptures**, **Fish Condition**, **Daily Batch/Tank (All- Subbatches)**, and **Lamprey Batch/Tank (All-Subbatches)** reports, if they have not already been printed.
 3. Send the .XML file to the FPC office via e-mail to smp@fpc.org or uploading to the FPC website (see **Section X.B**).

Remote SMP Site Data Entry Program

File Reports

Batch Info

Catch Catch Detail Incidental Catch Mark Recaptures Transportation Conditions Summary Cond.

Site: LGR Start: [] Hour: []

Batch: 09041 End: [] Hour: []

Gear Code: Choose Gear Code...

Sample Code: Choose Sample Code ... Sample Hours: [] min

Total Discharge: [] Turb Discharge: [] Total Spill (kcf): []

Comments 1: []

Comments 2: []

Batch	Start date	Start hour	End date	End hour	Trap locati...	Gear code	Sample code	Sample hours	River flow/...	Phouse 1 flo...	Phouse 2 flow	T
09041	2/9/2009	0700	2/10/2009	0700		GC	1	24	0	0	0	0
09069	3/9/2009	0700	3/10/2009	0700		GC	1	24	65	50	0	1

Confirm Overwrite Export File

Do you want to overwrite the file: C:\LGR09041.xml

Yes No

Record Count: 2

4. You must also send your hand logs to the Fish Passage Center via Fax to (503) 230-7559 or e-mail to smp@fpc.org.
 - E-mailed hand logs must be sent in PDF format. They can be sent in the same e-mail as the batch file (i.e., XML file).
 - If you cannot send the batches in on time, be sure to call a member of the data center staff and let us know the reason and when you expect to get the batch in.

VII.L. Reposts.

If you need to revise and resend a batch, you must edit the batch that was previously created (see instructions for editing a batch in **Section VIII** below). If you wish to resend a batch, **you must document why you are changing the batch and submit**

this documentation along with the batch, preferably via FAX or email. **FPC WILL NOT UPDATE BATCHES UNLESS PROPER DOCUMENTATION IS RECEIVED.**

You should also send a copy of this documentation to your project leader. If FPC has already posted the original batch, a reposted batch will not be allowed to overwrite the old batch. FPC staff must first delete the old batch before data from the newly updated batch can be posted. Call **Chris McCarty (503)230-4582** if you have any questions about reposting. Reposted batches must be sent via email.

When you send a batch for reposting, attach it to an email sent to repost@fpc.org, along with an explanation memo of why this batch is being resubmitted for reposting. If you use Microsoft Exchange, configure your mail client to send a return receipt back to you, acknowledging that the mail arrived.

To edit a pre-existing batch for reposting:

- Open the FPC32.net **Main Form**. Under the **Catch** tab, select the batch that needs editing (selected records have an arrow next to them) from the data grid by clicking on the record.
- Select the appropriate tab for the data that need to be edited (e.g., **Catch Detail**). Under that tab, select the record that needs to be edited. Choose the **Edit** button. Make the appropriate changes to the record and then choose **Save Record**.
- If changes are made to individual condition records, these changes must be re-promoted into the **Catch Detail**, **Incidental**, and **Mark/Recap** records. To re-promote, choose the **Summary Condition** tab and choose **Promote All** to rewrite or change the daily batch condition records in the **Catch Detail**, **Incidental** and **Mark/Recap** tables.
- Once you have made all the required changes, select the **Catch** tab and press the **Save As Batch** button. A dialog box will prompt you to overwrite the previous batch record. Choose **Yes**. This creates a new daily batch .XML file for the day you have edited.
- Send the changed batch along with the appropriate documentation to the FPC via email to repost@fpc.org (see above for further documentation).

VII.M. Special Situations.

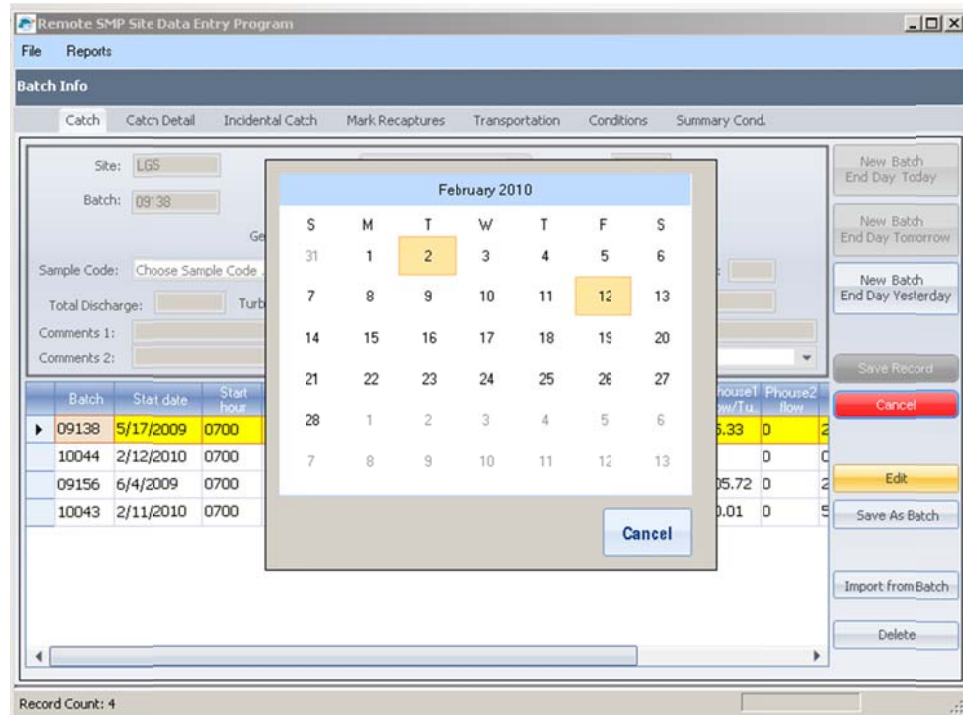
VII.M.1 - Daylight Savings Time Transitions:

- In the **Spring**, the start and end times will be recorded normally, but on the day when daylight savings time begins, the sampling hours will be 1 hour less and the flows averaged for 23 hours.
- In the **Fall**, the start and end times will be recorded normally, but on the day when daylight savings time ends, the sampling hours will be 1 hour more and the flows averaged for 25 hours.

VII.M.2 - Sampling End Date is the Same for Two Batches:

Each batch must have a unique batch number and end date. If sampling ends on the same day as the previous batch, the batch number must be that of the following day. Batch numbers are created automatically. From the FPC32.net **Main Form** you can create batches (and hence a batch number) for dates prior to the current date.

- Select **File** and click on **Create Older Days Batch**. A calendar will appear from which you may choose your batch end date. You are limited to the current year. To switch to a previous month, press and hold on the current month and move up to select the desired month. Double-click on the date for the batch you want to create.



- This batch must be edited. To edit the batch from the **Catch** tab, select the batch to be edited and choose the **Edit** button. The following are items that must be edited:
 - Put the **actual end date** and **end hour** in the **Comments** field
 - Put the **actual sample hours** in the **Sample Hours** field
 - Put the **adjusted sample end date** (the following day) in the **End Date** field
 - Be sure that you choose the appropriate **Sample Code** from the drop down list that reflects this adjusted sample
 - Choose **Save Record**.
- Follow instructions for sending the batch to FPC found in **Section VII.K**

VIII. Detailed Data Entry Instructions

The purpose of this section is to provide detailed information on the types of data that are entered into FPC32.net and how to enter these data. This section also provides instructions on how data can be edited if/when errors are found during data entry and validation.

For convenience, all data entry tabs in the FPC32.net **Main Form** have similar layouts. The fields found in each of the data entry tabs are presented in two ways. The upper portion of each data entry tab is a data entry panel. This panel is the location where new data are entered or existing data are edited. It provides an ordered list of metrics to be entered for each record. Many of the fields in this panel have data validation and integrity rules that check the data being entered to assist the user in determining if the entry is valid for the specified field. Although some fields have built in validation, not every field has validation checking routines. For clarification, this section of the manual provides information about suitable data entry for each field in each of the data entry tabs. Also, there is a glossary of the various terminology used throughout this manual (see **Section IV**).

The lower portion of each data entry tab is a data grid for display of entered data. From this data grid, data can be browsed (scrolling up and down and left and right) and sorted (by header). As mentioned earlier, sorting by multiple headers is possible. To do this, simply hold down the **Shift** key while selecting the column headers in the order you wish to sort them by. This data grid allows the user to view all entered data for a single batch for error checking and/or validation. For each of the data entry tabs, one or more of the left-most columns are frozen to help the user identify the row as they scroll to the right. Column headers can also be resized and can be wrapped. To resize a column header, click and drag a column separator (the line between two columns). Maximizing the data entry window, allows the user to see more of the column headers. Data cannot be entered or edited directly from the data grid.

To hide the **Main Form**, click on the **X** in the upper right hand corner. The program remains running in the background and can be re-opened by right-clicking on the FPC32.net icon in the system tray. To exit the FPC32.net program from the **Main Form**, choose **File / Exit**. If the **Main Form** is hidden, you may exit the FPC32.net program by right-clicking on the FPC32.net icon in the system tray and choosing **Exit**.

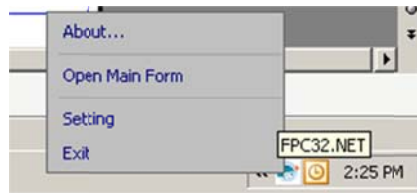
VIII.A. Catch Tab.

In the lower data grid, the **Batch** field is frozen on the left to help the user identify the row as they scroll to the right.

VIII.A.1 – Definitions and Data Entry

To view the **Catch** tab of the FPC32.net **Main Form**, either double-click on the FPC32.net icon on your desktop (if program not already running) or right-click on

the FPC32.net icon in the system tray and choose **Open Main Form**. The **Main Form** window opens with the **Catch** tab forward.



Upon being opened, the **Catch** tab displays the batch records that are in the temporary database in the data grid near the bottom. Each batch is represented by a single row in this data grid. Creating a new batch in the **Catch** tab depends on whether condition data were collected or not. If condition data were collected, the batch data from the condition sample are imported into the **Main Form** for editing and entering non-condition data. A detailed description of how to import condition data is provided in **Section VII.C.1** above. If no condition data were collected, a new batch record can be created from within the **Catch** tab of the **Main Form**. A detailed description of how to create a new batch from within the **Catch** tab is provided in **Section VII.C.2** above.

Batch	Start date	Start hour	End date	End hour	Trap location	Gear code	Sample code	Sample hours	River flow/To	Phouse1 flow/To	Phouse2 flow
09138	5/17/2009	0700	5/18/2009	0700		GC	1	24	94.19	65.33	0
10044	2/12/2010	0700	2/13/2010	0700		GC	1	24	0	0	0
09156	6/4/2009	0700	6/5/2009	0700		GC	1	24	131.91	105.72	0
10043	2/11/2010	0700	2/12/2010	0700		GC	1	24	100.02	50.01	0

To edit an existing batch select the batch record in the data grid and choose **Edit**. This allows the user to make changes via the data entry panel above the data grid. After necessary changes are made, choose **Save Record**.

Below is a table of the fields of data that are entered into the **Catch** tab along with the default settings for each field, prior to data entry. Following this table is a list of the fields and instructions of the types of data that should be entered into each field and how.

Field Name	Default Settings
Site	Set in setting dialog
Start date	Typically 24 hours prior to the end date
Batch	Computed based on system date and sample end date
End date	User defined based on whether End Date Today or End Date Tomorrow selected
Start hour	Default start hour is set to 0700, can be edited in the setting dialog
End hour	Default end hour is set to 0700, can be edited in the setting dialog
Trap location	Trap location is left blank
Gear code	Default gear code is set to GC, can be edited in the setting dialog
Sample code	Default sample code is set to 01, can be edited in the setting dialog
Sample hours	Default sample hours is set to 24
River flow	River flow default is zero
PH1 flow or Turbine Discharge	Power house 1 flow default is set to zero
PH2 flow	Power house 2 flow default is set to zero
Total Spill	Total spill default is set to zero
Comments	Comments are left blank

Start Date:

Start date is calculated based on whether the user chose the **End Date Today**, **End Date Tomorrow**, or the **End Date Yesterday** button. This is typically 24 hour prior to the end date. Format = MM/DD/YYYY.

Start Hour:

The default start hour is carried forward from the **Settings** screen (**Section III.A**). If the listed **Start Hour** is incorrect, enter the actual start hour, in 24hr military time. Numbers less than 0000 or greater than 2400 are restricted from entry here.

End Date:

End date is determined by the user when he/she selects the **End Date Today**, **End Date Tomorrow**, or the **End Date Yesterday** button. Format = MM/DD/YYYY.

End Hour:

The default end hour is carried forward from the **Settings** screen (**Section III.A**). If the listed **End Hour** is incorrect, enter the actual end hour, in 24hr military time. Numbers less than 0000 or greater than 2400 are restricted from entry here.

Trap Location:

This field is only used by the SMP trap sites and not visible for other non-trap sites.

- **Imnaha River Trap-** enter “1, 2, 3, or 4” for trap positions 1-4.

- **Lewiston Trap**- enter "0" or "east" when the trap is in its normal position.
- **Whitebird Trap**- enter the number of meters the trap is from the northern cable tower (e.g., 10m, 30m, 50m or 10, 30, 50).
- **Grande Ronde River Trap**- enter the number of meters from the east tower that the trap is located at (e.g., 175).

Gear Code:

The default **Gear Code** is carried forward from the **Settings** screen (**Section III.A**). If the listed **Gear Code** is incorrect, click on the **Gear Code** drop down list and select the correct **Gear Code**.

- **SMP Traps** must use **Gear Code** "**MT**" or "**00**"
- **SMP Sites at Dams** can use all Gear Codes, except "**MT**"
- **Gear Code = "00"** must be used when there is no sample conducted in a collection period.

Sample Code:

The default **Sample Code** is "**1**", which means "**Normal Complete Sample**". If you wish to change this, click on the **Sample Code** drop down list and select the desired **Sample Code**. Below is a list of the various **Sample Codes**, their meanings, and appropriate **Gear Codes** (in italics when applicable).

Sample Code	Description
1	Normal Complete Sample
2	Two or more samples taken during a day with separator cleanout
3	No sample or biased sample due to abnormal flows or inoperation of sample unit
4	No sample or biased sample due to weather conditions
5	No sample or biased sample due to equipment failure/maintenance/repair
7	Incomplete sample, no code provided, cause explained in comments
8	No fish counts entered: Fish accumulated and were sampled at a later date
9	Incomplete or biased sample, counts are modified to estimate a normal sample
10	Multiple sample rates used throughout day (not including sample rate for GBT sample)
12	Sample of fish accumulated 2 days, Samplecode minus 10 is number of days
13	Sample of fish accumulated 3 days, Samplecode minus 10 is number of days
14	Sample of fish accumulated 4 days, Samplecode minus 10 is number of days
15	Sample of fish accumulated 5 days, Samplecode minus 10 is number of days
16	Sample of fish accumulated 6 days, Samplecode minus 10 is number of days
17	Sample of fish accumulated 7 days, Samplecode minus 10 is number of days

- 1 = Normal Complete Sample (24 hours).
- 2 = Two or more samples taken during a day with separator clean out.
- 3 = No sample /biased sample due to abnormal flows or in-operation of sample unit. (*GC = 00 if no sample; GC = GC if bias sample*)
- 4 = No sample / biased sample due to weather conditions. (*GC = 00 if no sample; GC = GC if bias sample*)
- 5 = No sample / biased sample due to equipment failure / maintenance / repair. (*GC = 00 if no sample; GC = GC if bias sample*)
- 7 = Incomplete sample, no code provided, cause explained in comments.
- 8 = No fish counts were entered for this sample period; fish accumulated and were sampled at a later date.
- 9 = Incomplete / biased sample, counts are modified to estimate a normal sample.
- 10 = Multiple sample rates used throughout day (not including sample rate for GBT sample)
- ≥ 12 = Sample of fish accumulated 2 or more days. The sample code minus 10 is the number of days that fish accumulated before being sampled.

Sample Hours:

Enter the actual number of hours sampled, rounded to the nearest 100th place (e.g., 4 hours and 43 minutes = 4.72 hours). When daylight savings time begins and ends, the sample hours will need to be adjusted. The only time **Sample Hours** should be ≥24 is when **Sample Code** ≥ 12. For detailed instruction on these changes see **Section VII.M.1** above. If **Sample End Date** is the same for two batches see **Section VII.M.2** above.

Total Discharge

Total Discharge is the average hourly river flow (Kcfs) during the sampling period. This value is mandatory for the SMP sites at dams (BO2, JDA, MCN, RIS, LMN, LGS, and LGR) but it optional at the SMP trap sites (GRN, IMN, LEW, WTB). If a trap site chooses to enter this value, it is acceptable to use either KCFS or CFS units. **Total Discharge** is obtained from the COE's **Crohms System Daily Report** or from online COE data reports such as **Report 96** (ftp://ftp.nwd-wc.usace.army.mil/pub/project_data). A copy of this report should be sent to FPC along with your daily hand-logs. When daylight savings time begins and ends, the period for calculating the **Total Discharge** will need to be adjusted. For detailed instruction on these changes see **Section VII.M.1** above.

- On days when no sample is conducted, sites are still expected to send in a batch with flow and spill information only, using a **Gear Code** of "00" and a **Sample Code** of "3"

PH 1 Flow or Turbine Discharge:

For all sites except **BO2** and **RIS**, **PH1 Flow/Turbine Discharge** is the average hourly flow (in Kcfs) through the powerhouse during the sampling period of the batch. For **BO2** and **RIS**, **PH1 Flow** is the average hourly

flow (in Kcfs) through Powerhouse 1 during the sampling period of the batch.

- This field is mandatory for **BO2, JDA, MCN, RIS, LMN, LGS, and LGR**.
 - Obtain this daily number from the Army Corps. of Engineers at the project
 - For **BO2**, obtain this value by subtracting **BON 2 AVG DISCH** from **AVG TURB DISCH** on the **COE daily report**.
- This field is not displayed at **WTB, IMN, LEW, and GRN**.
- When daylight savings time begins and ends, the period for calculating the **PH1 Flow or Turbine Discharge** will need to be adjusted. For detailed instruction on these changes see **Section VII.M.1** above.
- At **JDA, MCN, LGS, LMN** and **LGR**, the sum of the **Turbine Discharge** and **Total Spill** cannot be greater than the **Total Discharge**. If this occurs, an error message is displayed.
- At **BO2** and **RIS**, the sum of **PH1 Flow, PH2 Flow, and Total Spill** cannot be greater than the **Total Discharge**. If this occurs, an error message is displayed.

PH 2 Flow:

This field only appears in the **Catch** data entry tab of the FPC32.net **Main Form** at **BO2** and **RIS**. **PH2 Flow** is the average hourly flow (in Kcfs) through Powerhouse 2 during the sampling period of the batch. This number is found on the COE daily report BON 2 AVG DISCH. When daylight savings time begins and ends, the period for calculating the **PH2 Flow** will need to be adjusted. For detailed instruction on these changes see **Section VII.M.1** above.

- At **BO2** and **RIS**, the sum of **PH1 Flow, PH2Flow, and Total Spill** cannot exceed the **Total Discharge**. If this occurs, an error message is displayed.

Total Spill:

Total Spill is the average hourly spill (Kcfs) during the sampling period.

- This field is mandatory for **BO2, JDA, MCN, RIS, LMN, LGS, and LGR**.
 - Obtain this value is in row **SPILL** in the COE daily report.
- This field is not displayed at **LEW, WTB, GRN, or IMN**.
- When daylight savings time begins and ends, the period for calculating the **Total Spill** will need to be adjusted. For detailed instruction on these changes see **Section VII.M.1** above.
- At **JDA, MCN, LGS, LMN** and **LGR**, the sum of the **Turbine Discharge** and **Total Spill** cannot be greater than the **Total Discharge**. If this occurs, an error message is displayed.
- At **BON** and **RIS**, the sum of **PH1 Flow, PH2 Flow, and Total Spill** cannot be greater than the **Total Discharge**. If this occurs, an error message is displayed.

Comments1 and Comments2:

Comments are used primarily to explain problems in getting the daily sample, as described in **Section VII.M.2** above. Observations of fish condition or abnormal size should also be included in the comments. Extraordinary events impacting fish passage should be noted in the comments field(s). The comments field should NOT be used to indicate data entry updates. *Such comments as water turbidity, lamprey, kokanee, etc. should not be included.* If **Sample End Date** is the same for two batches see **Section VII.M.2** above.

Comments2 has a drop-down menu that allows for entry of common comments during certain periods. FPC32.net allows for up to three user defined comments that can be edited throughout the season by the users. These user-defined comments are available in the **Comment2** drop-down menu. These user defined comments can be edited in the **Settings** dialog box of FPC32.net (see **Section VII.A.7** above).

VIII.A.2 – Editing Records in the Catch Data Entry Tab

Adjusting Batch Numbers and Creating Batches for Past Dates:

To create a batch that corresponds to another date other than Today's Date or Tomorrow's Date, choose **File | Create Older Days Batch** from the FPC32.net **Main Form**. A calendar appears. Select the date you want to create the batch for by double-clicking on the **End Date** of the batch you want to create. You are limited to creating batch for a date in the present year. The batch for the **End Date** you selected is automatically created. From the **Catch** tab, choose **Edit** and begin entering the flow, spill, and other important information.

The screenshot displays the 'Remote SMP Site Data Entry Program' window. The 'Batch Info' tab is active, showing fields for Site (LGS), Batch (09138), Sample Code (Choose Sample Code), Total Discharge, and Comments 1 and 2. A calendar for February 2010 is overlaid on the interface, with the date 2 highlighted. The calendar shows the following dates: 31, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13. The 'Batch' table at the bottom shows the following data:

Batch	Start date	Start hour
09138	5/17/2009	0700
10044	2/12/2010	0700
09156	6/4/2009	0700
10043	2/11/2010	0700

The 'Record Count' at the bottom is 4.

Editing Older Batches:

You can only edit one batch at a time. Each batch is stored on the local computer in a database, unless it has been deleted by the user. If a batch has been deleted by the user, it can be re-imported into the database. To do this from the **Catch** tab, choose **Import From Batch** and navigate to the directory where the final .XML files are being saved to the office computer hard drive. Select the .XML file for the batch you want to import and choose **Open**.

To edit a batch, you must first select the **Catch** data entry tab from the FPC32.met **Main Form**. Using the scroll bars in the data grid at the bottom of the page, scroll down to the batch you want to edit. Click on the record to highlight it. The selected record will turn yellow and have an arrow next to it. A batch is not selected until the record is selected by clicking the mouse (even though it appears yellow). *The arrow next to the record is the best indicator of the selected record.*

Once a batch has been selected, you may navigate to the data entry tab that requires editing (**Catch**, **Catch Detail**, **Incidental Catch**, **Mark Recaptures**, **Transportation**, or **Conditions**). Once you select the appropriate tab, navigate to the record (from the data grid) and choose the record that requires editing. You may activate a record for editing by selecting that record and pressing **Edit** or by double-clicking on the record you wish to edit. This populates the data entry panel at the top of the screen for the selected record. You may now edit any of the fields in this data entry panel. When you have completed making the necessary corrections to the record, choose **Save Record**.

Remote SMP Site Data Entry Program

File Reports

Batch Info

Catch Catch Detail Incidental Catch Mark Recaptures Transportation Conditions Summary Cond.

Site: LGS Start: [] Hour: []

Batch: 09138 End: [] Hour: []

Gear Code: Choose Gear Code...

Sample Code: Choose Sample Code ... Sample Hours: []

Total Discharge: [] Turb Discharge: [] Total Spill (kcf): []

Comments 1: []

Comments 2: [] Choose Comment

Batch	Start date	Start hour	End date	End hour	Trap location	Gear code	Sample code	Sample hours	River flow/To	Phouse1 flow/Tu	Phouse2 flow
▶ 09138	5/17/2009	0700	5/18/2009	0700		GC	1	24	94.19	65.33	0
10044	2/12/2010	0700	2/13/2010	0700		GC	1	24	0	0	0
09156	6/4/2009	0700	6/5/2009	0700		GC	1	24	131.91	105.72	0
10043	2/11/2010	0700	2/12/2010	0700		GC	1	24	100.02	50.01	0

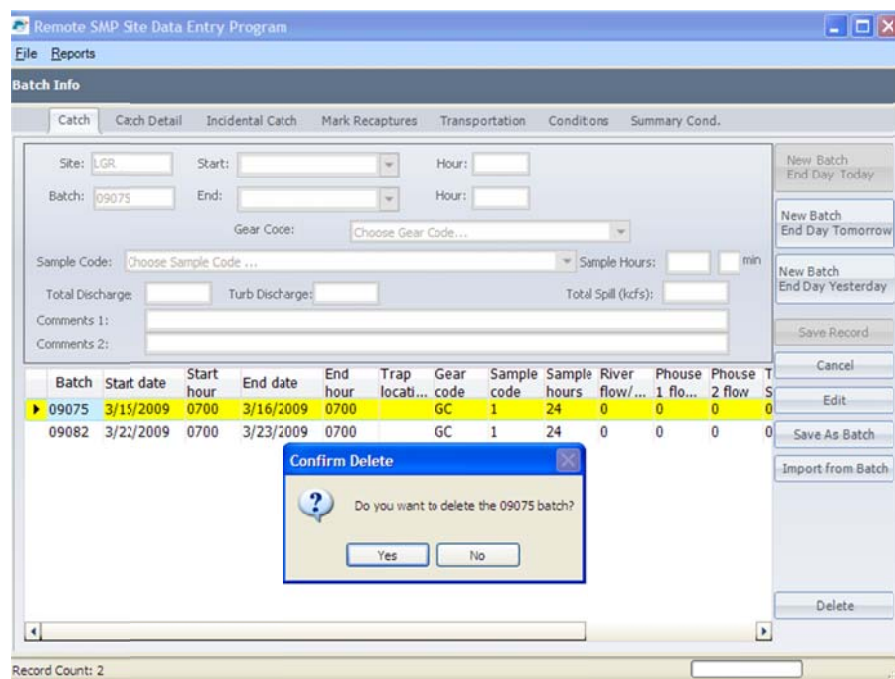
Record Count: 4

Buttons: New Batch End Day Today, New Batch End Day Tomorrow, New Batch End Day Yesterday, Save Record, Cancel, Edit, Save As Batch, Import from Batch, Delete

Removing a Batch Record from the Local Database

You may choose to delete batch records from the local database. To do this, select the batch record you wish to delete (from the **Catch** tab) and choose **Delete**. **This will delete all records entered into the local computer database for that batch (including condition, incidental catch, transportation, mark recap, and catch detail records).**

A dialog box appears asking you if you really want to delete the batch, choose **Yes** if you want to delete the batch along with all of its supporting records. **NOTE: Do not delete the current day's batch record created when entering condition records, edit it instead.**



A second dialog box appears, again asking if you want to delete the batch including all fish condition records. Choose **Yes** if you want to delete the batch along with all of its supporting records.



NOTE: This does not delete the records from the FPC database, it only deletes the batch and it's supporting records from your local database on your hard drive. If a batch has been deleted by the user, it can be re-imported into the local database. To do this from the

Catch tab, choose **Import From Batch** and navigate to the directory where the final .XML files are being saved. Select the .XML file for the batch you want to import and choose **Open**.

To make changes to the FPC database, the reposting procedure must be followed.

VIII.B. Catch Detail Tab.

In the lower data grid, the **Sub Batch**, **Sequence**, **Tank**, **Species Code**, **Age Code**, **Special Species Code**, **Coded Wire Tag**, and **Clip** fields are frozen on the left to help the user identify the row as they scroll to the right. Data are entered for each **Subbatch**, **Tank**, **Species Code**, **Age Code**, **Special Species Code** and **Coded Wire Tag** combination that were tallied as part of non-condition sampling.

VIII.B.1 – Definitions and Data Entry

Before any data can be entered or edited in the **Catch Detail** data entry tab, the user must specify which batch they intend to add/edit data to by selecting the corresponding batch in the **Catch** data entry tab. Once a batch has been selected in the **Catch** tab, you may navigate to the **Catch Detail** tab.

Subbat	Sequen	Tank	Species Code	Age Code	Special species	CWT	Clip	Gear code	Multipli	Sample rate	Sample count	Est. Co
1	3	A	ST				Y	GC	20	0.05	0	
2	2	B	AP				N	GC	5	0.2	2	
2	1	B	CO			N	N	GC	5	0.2	5	
1	2	A	AB				N	GC	20	0.05	2	
1	1	A	CH	1		N	N	GC	20	0.05	10	

To create a new record in the **Catch Detail** data entry tab, choose **New**. This activates the data entry panel at the top of the screen. When the first record is

created, **Site** and **Batch** are carried over from the **Catch** data entry tab. Also, default **Sample Rate(s)**, **Multiplier**, and **Gear Code** are carried over from the **Settings** screen. The user should enter a separate detailed record for each **Sub-batch**, **Tank** (where applicable), **Species**, **Clip**, **CWT**, and **Special Species Code** combination for the eight different target species of the SMP. For Chinook, separate **Age Codes** (1 or 0) should also be entered.

To edit a record, select the record from the data entry grid at the bottom of the screen. Each record has a sequence number to make the editing process easier for the user. A selected record has an arrow on the left. The user may scroll to the right to evaluate the data to make sure it is the correct record for editing. If the data need to be edited, either click on the record (i.e., row) of data to be edited and choose **Edit** or double-click on the record to be edited. The data from the record then populate the data entry panel at the top of the screen and are editable. Once necessary changes are made, choose **Save**. For ease of navigation, the **Tab Keys** can be used to move between fields and **Right and Left arrow keys** can be used to move the cursor within a data field.

Below is a table of the fields of data that are entered into the **Catch Detail** tab along with the default settings for each field, prior to data entry. Following this table is a list of the fields and instructions of the types of data that should be entered into each field and how.

Field Name	Default Settings
Site	Set in setting dialog
Sequence	For each subbatch, sequence starts at 1 and continues sequentially. When a new subbatch is started, sequence starts over at 1
Sub Batch	Starts at 1. The value of subbatch for the next record is the same as the previous entry, until the user changes the value.
Tank	Default is none. The value of tank for the next record is the same as the previous entry, until the user changes the value.
Species Code	Default is none. Species is a required field. The value of species code is the same as the previous entry, until the user changes the value.
Age	Default is none. This field is only used for Chinook.
Fin clipped	Default is none.
Coded Wire Tag	Default is none.
Special species code	Default is none.
Gear code	Default is none. The value of gear code is the same as the previous entry, until the user changes the value.
Multiplier	Default is set from the Setting dialog box. The value of multiplier is the same as the previous entry, until the user changes the value.
Sample rates	Default is set from the Setting dialog box. The value of sample rate is the same as the previous entry, until the user changes the value. There is only one sample rate per sub batch.
All number fields	All number fields are initially set to zero.

Sub Batch:

The default for the first record is 1. If the sample rate changes during sample day, create a new sub-batch for each period with a different sample rate. Enter 2 for second sub-batch, 3 for third, etc. Examples where separate sub-batches are appropriate include: 1) multiple sample rates are used within a single day (*Note: in this case, Sample Code in Catch tab should have value of 10*), 2) a GBT sample from the separator should be entered as a separate sub-batch, 3) separator mortalities should be entered as a separate sub-batch, 4) lamprey juveniles are encountered during separator clean-out procedures, etc.

- If lamprey juveniles are sampled above the sample gate (e.g., during separator clean-out procedures, removed from dewatering screens, etc.), these individuals should be identified to species (if possible) and recorded in **Catch Detail** (non-condition sample count) as a separate sub-batch, with a 100% sample rate, gear code of GC, and tank “none”. Any mortalities associated with these lamprey should also be recorded. If species ID is not possible, use species code LU when recording in **Catch Detail**.

FPC32.net now validates whether the **Sample Code** (from **Catch** tab) matches the number of sub-batches and sample rate data that are entered in **Catch Detail**. For example, if a **Sample Code** of “1” is entered into the **Catch** tab but two sub-batches with different sample rates are entered into **Catch Detail**, a “**Sample Code Validation Alert**” will appear. If/when this happens, simply finish the current record and choose **Save/New** followed by **Cancel**. Switch back to the **Catch** tab and edit the **Sample Code** to reflect that two sample rates were used for this batch (e.g., **Sample Code** = “10”).

Tank/Trap:

The **Tank** field is available for editing at **LGS**, **LMN** and **MCN**. Choose either “**A**”, “**B**”, or “**None**”. For these sites, “**None**” denotes a group of fish that were sampled from the separator and NOT from Tank “**A**” or “**B**”. Tank “**None**” for **BO2**, **JDA**, **LGR**, and **RIS** indicates that these sites only have a single tank. At **MCN** use Tank “**None**” to denote raceway 10. The **Trap** code only pertains to site **IMN**. Choose either “**A**” or “**B**” to designate trap.

Species Code:

Click on the drop down list under **Species Code** and select the appropriate species code. These are the only species codes that are allowed to be entered here.

Target Species Codes:

CH = Chinook
CO = Coho
SO = Sockeye

ST = Steelhead
 AB = Ammocoete (Brook)
 AP = Ammocoete (Pacific)
 AS = Ammocoete (Unknown)
 MP = Macrophthalmia (Pacific)
 LU = Lamprey sp. (Unidentified)

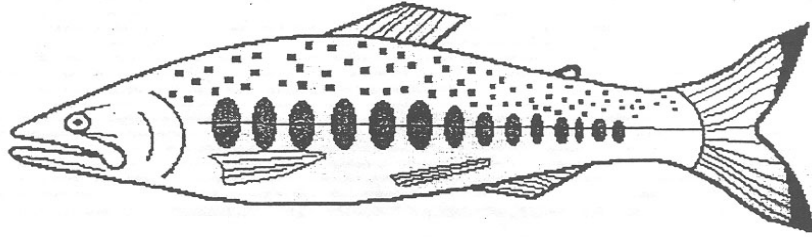
NOTE:

- Exclude Chinook mini-jacks (150-300mm) that are obvious precocious males to the extent possible from the Chinook smolt count. Enter them in the **Incidental Catch** data entry tab.
- Be aware that in April and May a significant number of Holdover Fall Chinook could be encountered in samples. These should be entered as Age 1 Chinook with a **Special Species Code** of “**HO**” (*see below for further information on identifying holdover fall Chinook*).
- All clipped sockeye/kokanee are to be recorded as sockeye, except at RIS. In general, sockeye/kokanee $\geq 200\text{mm}$ are to be recorded as kokanee in the **Incidental Catch** data entry tab unless it is clipped, has a CWT, and/or is PIT-tagged, in which case it is entered as a sockeye in **Catch Detail**. Use 450mm as the threshold for adult sockeye fallbacks.
- Use the less streamlined shape and the non-silvery color characteristics of rainbow trout to exclude them from the steelhead smolt count and enter them in the **Incidental Catch** data entry tab.
- **AS (Ammocoete Unknown)** should be used for ammocoetes that are less than 70mm or that cannot be positively identified as **AB** or **AP**.

Age Code:

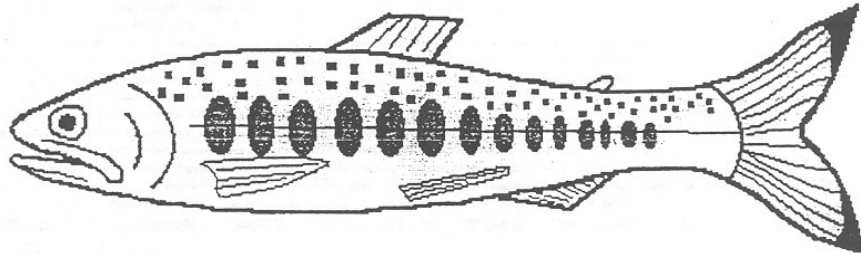
For **Chinook** choose “0” for subyearlings or “1” for yearlings. For all other species, the **Age Code** radio buttons are inactive. Age is useful for distinguishing Spring/Summer Chinook migrants (typically yearling) from fall Chinook migrants (typically subyearlings). Below is a series of diagrams to help users distinguish between yearling and subyearling Chinook, based on their morphology.

In recent years a large number of yearling fall Chinook have been released into the Snake River from Lyons Ferry Hatchery and acclimation ponds above Lower Granite Dam, and thus should be assigned a “1” even though their morphology is consistent with the “fall Chinook” shown below. Additionally, holdover fall Chinook should be assigned as age 1.



Fall Chinook (subyearling)

1. Caudal fin forked, with outer margin usually black.
2. Parr marks large, vertical oblong shapes centered on lateral line and wider than interspaces
3. Anal fin rays short, wedge shapes, usually not pigmented.
4. Large spots on back
5. **Body wider, eyes smaller, nose more sharp than yearling Spring/Summer Chinook (football shaped)**



Spring/Summer Chinook (yearling)

1. Caudal fin forked, usually edged in black.
2. Parr marks large, vertical oblong shapes centered on lateral line and wider than interspaces
3. Anal fin rays short, wedge shapes, usually not pigmented.
4. Large spots on back
5. **Body narrower, eyes larger, nose more rounded than subyearling fall Chinook**

Fin Clipped:

Choose "Y" for those fish that have a fin clip, either an adipose or ventral fin clipped. Choose "N" for those fish that do not have a fin clip.

Fin Clipped: ☐ Y ☒ N

CWT:

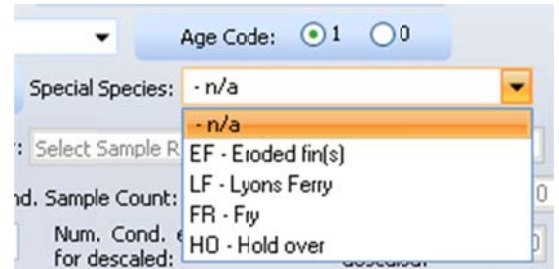
LGR, LGS, LMN, WTB, LEW, and GRN are to examine all unclipped Chinook (subyearling and yearlings), coho, and sockeye for coded-wire-tags. For unclipped Chinook, coho, and sockeye, choose "Y" for those with CWT and "N" for those without CWT. If fish were not examined for CWT than choose "N/A". The default for clipped Chinook, coho, and sockeye at these sites is "N/A". The default for **RIS, MCN, JDA and BON** is "N/A".

Cwt: ☐ Y ☐ N ☒ N/A

Special Species Code:

Click on the **Special Species** drop down list and Choose one of the following codes **FR**, **EF**, **LF**, or **HO**.

Choose “**FR**” for **Fry** if fish is 60mm or less at all sites. This code should only be used for Chinook, coho, or sockeye, as these are the only species that have fry. If Chinook is the species code, than the **Age Code** must be entered as “**0**”, since only age “**0**” Chinook can be fry. Steelhead fry should be entered as an incidental species (Rainbow trout) in the **Incidental Catch** data entry tab.



Age Code: ☒ 1 ☐ 0

Special Species: **n/a**

Select Sample R: **n/a**

nd. Sample Count: **EF - Eroded fin(s)**

Num. Cond. **LF - Lyons Ferry**

for descaled: **FR - Fry**

HO - Hold over

The “**EF**” code for **Eroded Fin(s)** is for use only with unclipped steelhead. If the dorsal fin or paired fins of the unclipped steelhead are clearly eroded as a result of being from a hatchery (and is clearly not the result of wear and tear from passing through the juvenile bypass system) use this code.

The “**LF**” code is for **Lyons Ferry Hatchery yearling fall Chinook** that are released either from Lyons Ferry Hatchery or at acclimation sites above Lower Granite Dam. This code should only be used at Snake River sites.

The “**HO**” code is for **Holdover yearling fall Chinook** which can be identified by morphologic characteristics at the Snake and Lower Columbia River dams. Those morphologic characteristics include downturned eye, deep body, deeply forked tail, and relatively little descaling (to differentiate from recently released hatchery fish). A photograph comparing Yearling spring/summer Chinook to a Holdover fall Chinook is shown below. Size can partly be used to identify a Holdover fall Chinook, as these fish are typically greater than 160mm. However, a few Holdover fall Chinook may be as small as 135mm. These fish may be smaller than some spring releases of hatchery yearling fall Chinook. Size alone is not a fool proof indicator. Finally, Holdover fall Chinook are typically observed in April and May.

The figure below compares a Yearling Sp/Su Chinook (top) to Holdover yearling fall Chinook (bottom) size, morphology and timing are useful for identifying “**HO**” fish.



NOTE: If fish do not meet the above-mentioned criteria, contact FPC for instructions as to which code is appropriate.

Gear Code:

Gear Code will be carried forward into the **Catch Detail** data entry tab from the **Catch** data entry tab. Most often, it will not need to be edited on the **Catch Detail** data entry tab. However, some sub-batches will require a separate **Gear Code** (e.g., GBT samples). To change the **Gear Code**,

click on the drop down menu and select the appropriate **Gear Code**. The **Gear Code** of “MT” cannot be entered at the SMP sites at dams, an error message will display. The **Gear Code** of “00” should only be used on days where no sample was taken.

Multiplier and Sample Rate:

For each sub-batch, you may choose the sample rate in one of two ways. First, the **Multiplier** drop-down list provides a list of some of the more common sample rates from which users may choose the appropriate multiplier (i.e., sample rate) for a given sub-batch. The multiplier’s corresponding sample rate will automatically appear in the **Sample Rate** field. Alternatively, users may enter the sample rate directly into the **Sample Rate** field.

- If you enter a sample rate directly, use a minimum of four digits to the right of the decimal point (e.g. enter 0.0083 for a 0.83% sample rate). If your sample rate has more than four digits, the user must **round** their sample

rate to six digits to the right of the decimal point (e.g., sample rate of 45.2% is 0.022123894, rounded to 0.022124).

- When you choose a **Multiplier** from the drop down menu or directly entered a **Sample Rate**, press **[Enter]** or **[Tab]** to move to the next field. Once a sample rate is chosen, the collection counts will be automatically calculated (as integers) when sample counts are entered (see below).
- FPC32.net now validates whether the **Sample Code** (from **Catch** tab) matches the number of sub-batches and sample rate data that are entered in **Catch Detail**. For example, if a **Sample Code** of “1” is entered into the **Catch** tab but two sub-batches with different sample rates are entered into **Catch Detail**, a “**Sample Code Validation Alert**” will appear. If/when this happens, simply finish the current record and choose **Save/New** followed by **Cancel**. Switch back to the **Catch** tab and edit the **Sample Code** to reflect that two sample rates were used for this batch (e.g., **Sample Code** = “10”).

Sample rates for each sub-batch appear in the **Sub-batch Sample Rate Lookup Table** located in the upper right corner of the **Catch Detail** tab. **If a mistake is made on the sample rate for a subbatch, it can be edited, but only after all of the records for that subbatch have been entered using the Catch Detail data entry tab (see instructions below).**

Subbat...	Sample...	Max Sequen...
2	0.005	10
1	0.01	10
3	1	2
4	1	15

To Change a Sample Rate after all Catch Detail Records have been Entered: single-click on the sample rate in the **Sub-batch Sample Rate Lookup Table** and it becomes editable. Type in the correct sample rate and press the **Enter** key. A dialog box appears asking if you want to change the sample rate. Choose **Yes**.

Non-Cond Sample Count:

Enter the number of non-condition fish sampled. This number includes sample mortalities.

- **NEW:** If lamprey juveniles are sampled above the sample gate (e.g., during separator clean-out procedures, removed from dewatering screens, etc.), these individuals should be identified to species (if possible) and recorded in **Catch Detail** (non-condition sample count) as a separate sub-batch, with a 100% sample rate, gear code of GC, and tank "none". Any mortalities associated with these lamprey should also be recorded. If species ID is not possible, use species code LU when recording in **Catch Detail**.

Est. Collection:

FPC32.net automatically calculates this field by dividing **Sample Rate** into **Sample Count**. This number is then rounded to the nearest hundredth place. Using integer multipliers instead of sample rates will reduce any rounding errors that may appear in the calculated quantity. **The Estimated Collection is a calculated number and should not be edited EXCEPT when entering Separator Mortalities (see Facility Morts. below).** The **Est. Collection** can only be overwritten if a sample rate of 100% is chosen.

Num Exam for Descal:

The **Num Exam for Descal** is a calculated field (**Num Exam Descal = Sample Count - Sample Morts**). This equation assumes that 100% of the non-condition sample (excluding sample mortalities) was examined for descaling. If this is not

the case, you may enter the correct **Num Exam for Descaling** after entering the **Sample Count** and **Sample Morts**.

- If you over-write the calculated value for **Num Exam for Descaling**, this must be the last entry before hitting the **Save/New** button.
- The automatic field validation logic displays an error message if the **Sample Count** minus **Sample Morts** is less than the number examined for descaling.
- Fish collected for GBT (**Gear Code** = “GB”) are not to be examined for descaling. For sub-batches with **Gear Code** “GB”, the default **Num. Exam for Descal** is 0.
- Fry and Lamprey juveniles are not to be examined for descaling. The default **Num Exam for Descal** is 0 when **Species Codes** (AB, AP, AS, or MP) or when **Special Species** “FR” are selected.

Num Descaled:

Enter the number of fish descaled from the non-condition fish that were examined for descaling. A fish that has greater than 20% descaling on one side is considered descaled.

- The auto field validation logic checks to see if **Number Descaled** is greater than **Num Exam for Descal**, if so, an error message is displayed.

Sample Morts:

For each sub-batch, enter the number of SMP related sampling mortalities for each species/age/rearing disposition. This includes all fish that are dead in the sample tank(s) or those GBT fish that died after being sampled from the separator.

- Separator mortalities get entered in a special way (see **Facility Morts** section below).
- Do NOT enter a single mortality in more than one place. This quantity is subtracted from **Sample Count**, and the result is the **Num Exam for Descaling**.
- Mortalities are NOT examined for descaling.

NOTES:

- If a mortality is externally marked (elastomer tagged or freeze branded) the following steps must be taken:
 - Enter the mort as a regular mortality
 - Enter a comment in the comment field (**Catch** data entry tab) describing the external mark of the mort. Use the following format for the comment in the **Catch** data entry tab: *CH1-AD EL-RE 3 mort.* (This indicates that three of the clipped yearling Chinook that had a red elastomer tag on the left side were mortalities)
 - Enter the marked mort as a marked live fish in the **Mark / Recaptures** data entry tab.
- At **BON** and **JDA**, all mortalities should be considered sample mortalities EXCEPT when it is clear that the fish has been dead for a significant period of time prior to entering the sample tank. These fish

should be entered as Facility Mortalities. Assigning these mortalities as Facility Mortalities should be approved by The Fish Passage Center.

Facility Morts:

In a sub-batch, enter the daily number of facility related mortalities (e.g. transportation raceways, separator morts.), for each species/age/rearing disposition. For raceway and other non-separator mortalities, enter the number of mortalities directly into the **Facility Morts** field for the appropriate species/age/rearing disposition combination. For **Separator Morts**, use the following protocol.

Separator Mortalities should be entered as a separate sub-batch. For this sub-batch, enter a **Sample Rate** of “1”. For each Species/Age/Clip/CWT combination, enter a **Non-Cond. Sample Count** of “0” and enter the number of mortalities in the **Estimated Collection** and the **Facility Mortality** fields. This way, the separator mortalities will be considered facility mortalities and included in the collection count, but not in the sample count. This field does not appear at the SMP trap sites.

NOTES:

- If a mortality is externally marked (elastomer tagged or freeze branded) the following steps must be taken:
 - Enter the mort as a regular mortality
 - Enter a comment in the comment field (**Catch** data entry tab) describing the external mark of the mort. Use the following format for the comment in the **Catch** data entry tab: *CH1-AD EL-RE 3 mort.* (This indicates that three of the clipped yearling Chinook that had a red elastomer tag on the left side were mortalities)
 - Enter the marked mort as a marked live fish in the **Mark / Recaptures** data entry tab.
- At **BON** and **JDA**, all mortalities should be considered sample mortalities EXCEPT when it is clear that the fish has been dead for a significant period of time prior to entering the sample tank. These fish should be entered as Facility Mortalities. Assigning these mortalities as Facility Mortalities should be approved by The Fish Passage Center.

Research Morts:

For each Species/Age/Clip/CWT combination, enter the daily number of fish taken out of the SMP sample and sacrificed by non-SMP researchers. For example, mortalities from USGS radio telemetry marking should be entered as **Research Mortalities**.

PIT Tag Morts:

This field is only used at **RIS**, **WTB**, **LEW**, **IMN**, and **GRN**. Enter the number of mortalities due to SMP PIT tagging operations.

Promoted Summary Condition Fish:

Individual fish examined for fish condition that have been entered through the touch screen and/or edited through the **Condition** tab need to be Summarized and Promoted to the **Catch Detail**, **Incidental Catch**, and **Mark Recaptures** tab. This is done by using the **Promote All** button found in the **Summary Cond.** tab. To learn more about the **Summary Condition** tab and the promotion of condition fish into the **Catch Detail** data entry tab see **Section VIII.G.**

The **Condition Summary** tab summarizes the condition fish by Species/Sub-batch groups (Sub-batch/Tank/Species/Age/Mark type/CWT). The **Promote All** button adds the total condition fish sample to **Catch Detail** under the fields **Cond. Sample Count**, **Num Cond. fish examined for descaling**, and **Num. Cond. fish descaled**. These fields cannot be edited. To change the number of condition fish sampled or descaled, the fish condition sub-batch records must be edited in the **Conditions** tab. When data are entered into **Catch Detail** prior to promotion, the **Sample Rate(s)** for the condition fish sub-batch(es) are automatically assigned based on what was entered into **Catch Detail**. If data were not entered into **Catch Detail** prior to promotion, the sample rate(s) assigned to the condition fish sub-batch(es) are the default sample rate(s) from the **Settings** screen. If these sample rates were not used, you must edit the sample rates for the condition sub-batches prior to promotion. The sample rate for each of the sub-batches in the review panel is applied to the **Cond. Sample Count** to produce the **Estimated Cond. Collection** (this field cannot be edited). The program adds the **Cond. Sample Count** and **Non-Cond Sample Count** together to produce the **Total Count**. After promoting, the **Total Collection** is estimated. This estimate is based on the **Total Sample Count** and the **Sample Rate**. Depending on what Sample Rate is used, there are times when this **Total Collection** is NOT equal to the sum of the **Condition** and **Non-Condition Collections**, due to rounding. The program then adds the fields **Num. Examined for Descal** and **Num. Cond. Exam for Descal.**, producing **Total Num. Exam. for Descal**. The program also adds the **Num. Descaled** and the **Num. Cond. Descaled**, producing **Total Num. Descaled**.

NOTE: *None of these Condition fields or TOTAL fields can be edited. In order to change the numbers, the individual fish records for condition fish must be edited using the Conditions data entry tab and re-promoted via the Condition Summary data entry tab.*

VIII.B.2 – Editing or Deleting Catch Detail Records:

You can only edit one record from the **Catch Detail** data entry tab at a time. To edit a record, you must first select the record from the data grid at the bottom of the screen by double-clicking on the record. The data from the selected record will populate the data entry panel and can be edited. The arrow next to the record is the best indicator of the selected record. At this point, edits can be made to the record. Once edits are made, choose the **Save Record** button.

To delete a record, single-click on the record you wish to delete and choose the **Delete** button. If **Delete** is chosen, you will get a prompt confirming that the record is to be deleted, select **Yes** and that record will be removed from the local database.

VIII.C. Incidental Catch Tab.

The **Incidental Catch** tab is for recording daily sample counts and mortalities of incidental species (i.e., non-target species). SMP target species are to be entered using the **Catch Detail** tab. Since the data grid has so few columns, there are no frozen fields in the **Incidental Catch** data entry tab.

VIII.C.1 – Definitions and Data Entry

Before any data can be entered or edited in the **Incidental Catch** data entry tab, the user must specify which batch they intend to add/edit data to by selecting the corresponding batch in the **Catch** data entry tab. Once a batch has been selected in the **Catch** tab, you may navigate to the **Incidental Catch** tab.

Remote SMP Site Data Entry Program

File Reports

Incidental Catch

Catch Catch Detail Incidental Catch Mark Recaptures Transportation Conditions Summary Cond.

Site: LGS Sequence: 3

Batch: 11027 Species Code: A1 - Chinook Adult

Non-Cond. Sample Count: 0 Cond. Count: 0 Total Count: 0 Sample Morts: 0

Sequence	Species Code	Non-Cond Sample Count	Cond. Count	Total Count	Samp. Morts
2	SJ	500	0	500	0
1	PM	2	0	2	0

New Save Cancel Edit Delete

Record Count: 2

To create a new record in the **Incidental Catch** data entry tab, choose **New**. This activates the data entry panel at the top of the screen. When the first record is created, **Site** and **Batch** are carried over from the **Catch** data entry tab. The user should enter a separate detailed record for each incidental species that was identified in the sample.

To edit a record, select the record from the data entry grid at the bottom of the screen. Each record has a sequence number to make the editing process easier

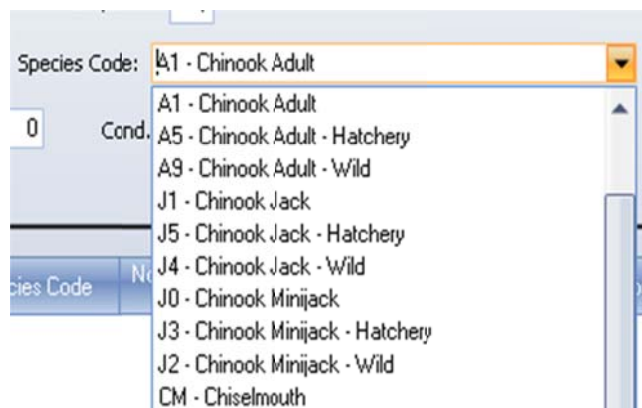
for the user. A selected record has an arrow on the left. The user may scroll to the right to evaluate the data to make sure it is the correct record for editing. If the data need to be edited, click on the record (i.e., row) of data to be edited and choose **Edit**. The data from the record then populate the data entry panel at the top of the screen and are editable. Once necessary changes are made, choose **Save**. For ease of navigation, the **Tab Keys** can be used to move between fields and **Right and Left arrow keys** can be used to move the cursor within a data field.

Below is a table of the fields of data that are entered into the **Incidental Catch** tab along with the default settings for each field, prior to data entry. Following this table is a list of the fields and instructions of the types of data that should be entered into each field and how.

Field Name	Default Settings
Site	Set in setting dialog
Batch	Computed based on system date
Sequence	For each batch, the first incidental catch record sequence starts at 1 and continues sequentially.
Species Code	Default is none. Species is a required field.
All number fields	All number fields are initially set to zero. These fields include sample count, condition count, total count and sample mortalities.

Species Code:

Click on the **Species Code** drop down list within the cell and select the appropriate species and species code. The list is sorted alphabetically by **Incidental Species Name**, **NOT Incidental Species Code**.



Incidental Code	Incidental Species Name	Incidental Code	Incidental Species Name
BM	Bass, Large Mouth	PM	Peamouth
BS	Bass, Small Mouth	PE	Perch
BL	Bluegill and Pumpkinseed	SQ	Pike Minnow, Northern
BH	Bullhead	PI	Salmon, Pink (juv)
CP	Carp	SR	Sand Roller
CC	Channel Cat	SC	Sculpin species
A1	Adult Chinook	SA	Shad Adult
A5	Adult Hatchery Chinook	SJ	Shad Juvenile
A9	Adult Wild Chinook	RS	Shiner, Redside
J1	Chinook Jack (12-22 in.)	SP	Siberian Prawn
J5	Chinook Jack – Hatchery	A4	Sockeye Adult
J4	Chinook Jack – Wild	A8	Sockeye Adult – Hatchery
J0	Chinook Minijack (6-12 in.)	AC	Sockeye Adult - Wild
J3	Chinook Minijack – Hatchery	A3	Steelhead Adult
J2	Chinook Minijack - Wild	A7	Steelhead Adult – Hatchery
CM	Chiselmouth	AB	Steelhead Adult – Wild
UM	Chum	SK	Stickleback, 3 Spine
A2	Coho Adult	SN	Sturgeon, Green
A6	Coho Adult – Hatchery	SG	Sturgeon, White
AA	Coho Adult – Wild	BU	Sucker, Bridgelip
CR	Crappie species	LU	Sucker, Largescale
LD	Dace – Long Nose	MU	Sucker, Mountain
SD	Dace – Speckled	SU	Sucker, Other
AD	Kelt Adult	TT	Tench
AE	Kelt Adult - Hatchery	BT	Trout – Brook
AF	Kelt Adult – Wild	NT	Trout – Brown
BK	Killifish, Banded	LT	Trout – Bull
KO	Kokanee	CT	Trout – Cutthroat
LK	Lamprey Adult (Brook)	RT	Trout – Rainbow
LP	Lamprey Adult (Pacific)	WE	Walleye
LR	Lamprey Adult (River)	WA	Warmouth
MA	Madtom, Tadpole	LW	Whitefish – Lake
OT	Other species not listed	MW	Whitefish - Mountain

Notes:

- If you see a **Bull Trout “LT”**, it is important that you minimize handling and return it to the river as soon as possible.
- If you enter “Other Species, **OT**”, be sure to indicate what this was in your comment(s) for the batch (**Catch Tab**).

Sample Count:

Enter the number of incidental fish of each particular **Species Code** found in the sample tank.

Sample Morts:

Enter the number of incidental mortalities found in the sample. Only required for lamprey adults (“**LP**”, “**LK**”, and “**LR**”).

Promoted Summary Condition Fish:

Individual incidental species that were examined as part of the condition sample and entered with the **Touch Screen** (and/or edited through the **Condition** tab) need to be Summarized and Promoted to the **Incidental Catch** data entry tab.

This is done by using the **Promote All** button found in the **Summary Cond. Tab**. This button, when selected, summarizes the incidental condition fish by Species/Subbatch groups and populates the total sample count for each incidental fish species under the field **Cond. Count**. This field cannot be edited. To change this **Cond. Count** field, individual records must be edited in the **Conditions** data entry tab and re-promoted via the **Summary Cond.** data entry tab. To learn more about the **Summary Condition** tab and the promotion of condition fish into the **Incidental Catch** data entry tab see **Section VIII.G**.

VIII.C.2 – Editing or Deleting Incidental Catch Records:

You can only edit one record from the **Incidental Catch** data entry tab at a time. To edit a record, you must first select the record from the data grid at the bottom of the screen by either double-clicking on the record. The selected record automatically populate the data entry panel. The arrow next to the record is the best indicator of the selected record. At this point, edits can be made to the record. Once edits are made, choose the **Save** button. If no edits are necessary, choose the **Cancel** button

To delete a record, single-click on the record you wish to delete (make sure the record is highlighted and has an arrow next to it) and choose the **Delete** button. You will get a prompt confirming that the record is to be deleted, select **Yes** and that record will be removed from the local database.

VIII.D. Mark Recapture Tab.

In the lower data grid, the **Subbatch**, **Sequence**, **Tank**, **Species Code**, and **Age Code** fields are frozen on the left to help the user identify the row as they scroll to the right. Data are entered for each **Sub-batch**, **Tank**, **Species Code**, **Age Code**, and **Mark Type** combination that were tallied as part of non-condition sampling.

Remote SMP Site Data Entry Program

File Reports

Mark Recaptures

Catch Catch Detail Incidental Catch Mark Recaptures Transportation Conditions Summary Cond.

Site: LGS Sub Batch: Sequence: 2 Tank/Trap: A B None

Batch: 10044 Species Code: CH - Chinook Age Code: 1 0

Mark Type: ER - Elastomer Tag Right

Brand Loc: - N/A Brand Code: - N/A

Brand Orientation: - N/A Tag Number:

Tag Color: - N/A

Clip Code: - N/A Supplemental Code:

Length: Non-Cond. Count: 0 Cond. Count: 0 Total Count: 0

Subbat	Sequen	Tank	Species code	Age code	Mark type	Brand location	Brand code	Brand orient	Tag number	Color code	Clip code	Supplemental
1	1	A	CH	1	ER					OR	AD	

Record Count: 1

New Save Cancel Edit Delete

VIII.D.1 – Definitions and Data Entry

Before any data can be entered or edited in the **Mark Recaptures** data entry tab, the user must specify which batch they intend to add/edit data to by selecting the corresponding batch in the **Catch** data entry tab. Once a batch has been selected in the **Catch** tab, you may navigate to the **Mark Recaptures** data entry tab.

To create a new record in the **Mark Recaptures** data entry tab, choose **New**. This activates the data entry panel at the top of the screen. When the first record is created, **Site** and **Batch** are carried over from the **Catch** data entry tab. The user should enter a separate detailed record for each **Sub-batch**, **Tank**, **Species Code**, **Age Code**, and **Mark Type** combination.

To edit a record, double-click on the record from the data entry grid at the bottom of the screen. Each record has a sequence number to make the editing process easier for the user. The data from the record then populate the data entry panel at the top of the screen and are editable. Once necessary changes are made, choose **Save**. For ease of navigation, the **Tab Keys** can be used to move between fields and **Right and Left arrow keys** can be used to move the cursor within a data field.

Below is a table of the fields of data that are entered into the **Mark Recaptures** data entry tab along with the default settings for each field, prior to data entry. Following this table is a list of the fields and instructions of the types of data that should be entered into each field and how.

Field Name	Default Settings
Site	Set in setting dialog
Sequence	For each subbatch, sequence starts at 1 and continues sequentially. When a new subbatch is started, sequence starts over at 1
Subbatch	Starts at 1. The value of subbatch for the next record is the same as the previous entry, until the user changes the value.
Tank	Default is none. The value of tank for the next record is the same as the previous entry, until the user changes the value.
Species Code	Default is none. Species is a required field. The value of species code is the same as the previous entry, until the user changes the value.
Age	Default is none. This field is only used for Chinook.
Mark type	Default is none.
Brand location	Default is none.
Brand code	Default is none.
Brand orientation	Default is none.
Tag number	Field is blank.
Tag color	Default is none.
Clip code	Default is none.
Supplemental code	Field is blank.
Length	Field is blank.
All number fields	Most number fields are initially set to zero. These fields include tally, condition count and total count.

Sub Batch:

This field facilitates the reporting of marked fish in samples carried out using different sample rates and/or mechanisms, within one batch or sampling period. The default is “1”. Make sure you are aware of which sub-batch the marked fish were sampled in for each entry in the **Mark Recaptures** data entry tab. When entering records in the **Mark Recaptures** tab, the sub-batch will be carried forward for each new record, until it is changed by the user.

Tank/Trap:

The **Tank** field only appears at **LGS**, **LMN**, and **MCN**. Enter “A” or “B” to designate the tank from which the marked fish was sampled. The **Trap** field is to only be used by the **IMN Trap**. Enter “A” or “B” to designate trap.

Species Code:

Click on the **Species Code** drop down list and select the appropriate species code from the list box. Only choose “RT” for Rainbow Trout if you encounter marked rainbow trout.

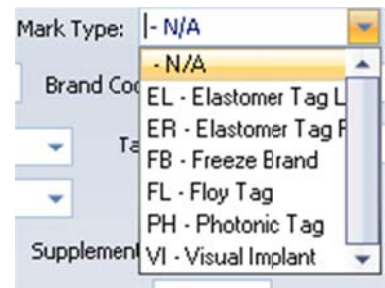


Age Code:

This field is to be used for **Chinook** only. Click on “0” for subyearling Chinook or “1” for yearling Chinook. See **Section VIII.B.1** for a morphological diagram and methodology to distinguish between yearling and subyearling Chinook.

Mark Type:

Click on the **Mark Type** drop down list and select the type of external mark observed on a fish or group of fish with identical mark types/attributes. Current valid mark types are:



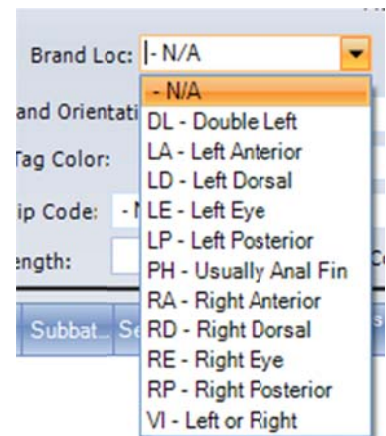
NOTES:

- The location of Elastomer tags are built into the Mark Type code (“EL” or “ER”). You do NOT need to enter a **Tag/Brand Location** for Elastomer tags (see below)
- Coded Wire tags and PIT tags are internal marks that are not included in this entry screen. Recaptured PIT tagged fish are reported directly to PTAGIS and not entered into FPC32.net.

Brand Location:

Click on the **Brand Loc** drop down menu and select a location code for **Freeze Brand** and **Photonic Tags** only. The location of **Elastomer** tags is now designated in the **Mark Type** drop down list (see above).

- Field validation logic checks to see what mark type was entered. An error message is displayed if the wrong location codes are used for the wrong mark type.
- An error message is also displayed if **Mark Type** is a **Floy** tag or a **Visual Implant** tag and data entry is attempted in this field.



Brand Code:

This is for **Freeze Brands** (i.e., **Mark Type** = “FB”) only. Select the brand from the drop down list.

Brand Orientation:

This field is only used with **Freeze Brands** (i.e., **Mark Type** = “FB”). Click on the drop down list and select an orientation. Examples include: 12 o'clock = 1, 3 o'clock = 2, 6 o'clock = 3, 9 o'clock = 4.

- An error message is displayed if the mark type is anything other than “FB”, and data entry is attempted here.

Tag Number:

This field is for **Floy** and **Visual Implant Tags** only (i.e., **Mark Type** = “FL” or “VI”). If it is discernible; enter the tag number in this field.

- An error message is displayed if Mark Type is FB, EL or ER, and data entry is attempted here.

Tag Color:

This field is for **Elastomer Tags** only (i.e., **Mark Type** = “EL” or “ER”). Click on the **Tag Color** drop down list and select the appropriate color code. Leave blank for numbered **VI** tags.

- If a color code entry is attempted for any other mark type, an error message is displayed.

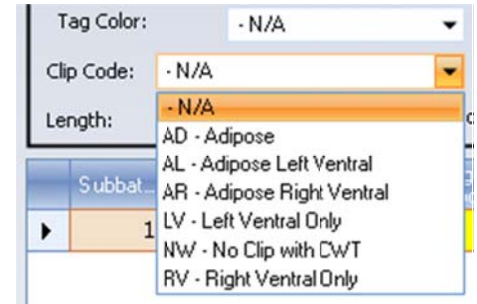
A screenshot of a software interface showing a dropdown menu for 'Tag Color'. The menu is open, displaying a list of color codes: BL - Blue, GR - Green, OR - Orange, PI - Pink, RE - Red, YE - Yellow, PU - Purple, and OT - Other. The 'Tag Color' field above the menu is set to '- N/A'. Below the menu, there are buttons labeled 'Subb...' and 'Sequ...'.

Tag Color
- N/A
BL - Blue
GR - Green
OR - Orange
PI - Pink
RE - Red
YE - Yellow
PU - Purple
OT - Other

Clip Code:

Click on the **Clip Code** drop down list and select the appropriate code for the clipped fins, and clipped fin combinations on marked fish.

- Select **N/A** when the fish is unclipped

A screenshot of a software interface showing a dropdown menu for 'Clip Code'. The menu is open, displaying a list of codes: AD - Adipose, AL - Adipose Left Ventral, AR - Adipose Right Ventral, LV - Left Ventral Only, NW - No Clip with Cw/T, and RV - Right Ventral Only. The 'Clip Code' field above the menu is set to '- N/A'. Below the menu, there are buttons labeled 'Subbat...' and '1'.

Clip Code
- N/A
AD - Adipose
AL - Adipose Left Ventral
AR - Adipose Right Ventral
LV - Left Ventral Only
NW - No Clip with Cw/T
RV - Right Ventral Only

Supplemental Code:

Leave blank.

Tally Total: For each **Sub-batch**, **Tank**, **Species Code**, **Age Code**, and **Mark Type** combination, enter total number sampled (non-condition sample only). If entering individual fish records (e.g. individual freeze brand fish) then enter “1”.

Promoted Summary Condition fish:

Individual **Mark Recapture** records from fish that were examined as part of the condition sample and entered with the **Touch Screen** (and/or edited through the **Condition** tab) need to be **Summarized** and **Promoted** to the **Mark Recaptures** data entry tab. This is done by using the **Promote All** button found in the **Summary Cond. Tab**. This button, when selected, summarizes the **Mark Recaptures** into **Subbatch/Tank/Species Code/Age Code** and **Mark Type** groups and populates the **Cond. Count** field in the **Mark Recaptures** data entry tab. This field cannot be edited. To change this **Cond. Count** field, individual records must be edited in the **Conditions** data entry tab data and re-promoted via the **Summary Cond.** data entry tab. To learn more about the **Summary Condition** tab and the promotion of condition fish into the **Mark Recaptures** data entry tab see **Section VIII.G**.

VIII.D.2 – Editing or Deleting Mark Recaptures Records:

You can only edit one record from the **Mark Recaptures** data entry tab at a time. To edit a record, first double-click on the record you wish to edit. The data entry panel (top of screen) will automatically be populated with that record’s data. At this point, edits can be made to the record. Once edits are made, choose the **Save** button. If no edits are necessary, choose the **Cancel** button.

To delete a record, single-click on the record you wish to delete and choose the **Delete** button. You will get a prompt confirming that the record is to be deleted, select yes and that record will be removed from the local database.

VIII.E. Transportation Tab.

The **Transportation** data entry tab is for transportation sites only (i.e., **LGR**, **LGS**, **LMN**, and **MCN**) and is intended for **target salmonid species only**. Each record entered into the **Transportation** data entry tab is broken into groups, based on **Species Code**, **Age Code**, **Tank**, **Special Species** (EF and FR), **Clipped/Unclipped**, and **Coded Wire Tag** combinations. The numbers for **Bypassed**, **Trucked**, and **Barged** are derived from the **Collection Totals** minus total mortalities (sample, facility, and research) for each **Species Code**, **Age**, **Tank**, **Special Species** (EF and FR), **Clipped/Unclipped**, and **Coded Wire Tag** combination. Since the data grid has so few columns, there are no frozen fields in the **Transportation** data entry tab.

VIII.E.1 – Definitions and Data Entry

Before any data can be entered or edited in the **Transportation** data entry tab, the user must specify which batch they intend to add/edit data to by selecting the corresponding batch in the **Catch** data entry tab. Once a batch has been selected in the **Catch** tab, you may navigate to the **Transportation** data entry tab.

To create a new record in the **Transportation** data entry tab, choose **New**. This activates the data entry panel at the top of the screen. When the first record is created, **Site** and **Batch** are carried over from the **Catch** data entry tab. The user should enter a separate detailed record for each **Species Code**, **Age Code**, **Tank**, **Special Species** (EF and FR only), **Clipped/Unclipped**, and **Coded Wire Tag** combination.

FPC32.net allows users to import the different **Species Code**, **Age Code**, **Tank**, **Special Species** (EF and Fry), **Clipped/Unclipped**, and **CWT** combinations from the **Catch Detail** tab into the **Transportation** tab. This saves time, as it is no longer necessary to enter every possible combination again. However, only data in **Catch Detail** for that particular batch are imported. This means that additional **Species Code**, **Age Code**, **Tank**, **Special Species** (EF and Fry), **Clipped/Unclipped**, and **CWT** combinations from previous days may need to be entered, when every-other-day transportation is in place. Furthermore, if condition data have not been promoted to **Catch Detail**, some **Species Code**, **Age Code**, **Tank**, **Special Species** (EF and Fry), **Clipped/Unclipped**, and **CWT** combinations may not be present.

To edit a record, double-click on the record from the data entry grid at the bottom of the screen. Each record has a sequence number to make the editing process easier for the user. The data from the record then populate the data entry panel at the top of the screen and are editable. Once necessary changes are made, choose the **Save** button. For ease of navigation, the **Tab Keys** can be used to move between fields and **Right and Left arrow keys** can be used to move the cursor within a data field.

Below is a table of the fields of data that are entered into the **Transportation** data entry tab along with the default settings for each field, prior to data entry. Following this table is a list of the fields and instructions of the types of data that should be entered into each field and how.

Field Name	Default Settings
Site	Set in setting dialog
Batch	Computed based on system date
Sequence	For each batch, the first incidental catch record sequence starts at 1 and continues sequentially.
Tank	Default is none. The value of tank for the next record is the same as the previous entry, until the user changes the value.
Species code	Default is set to Chinook (CH). The value of species code for the next record is the same as the previous entry, until the user changes the value. Species code is a required field.
Age code	Default is set to 1. The value of age code for the next record is the same as the previous entry, until the user changes the value.
Fin clipped	Default is none.
Coded wire tag	Default is none.

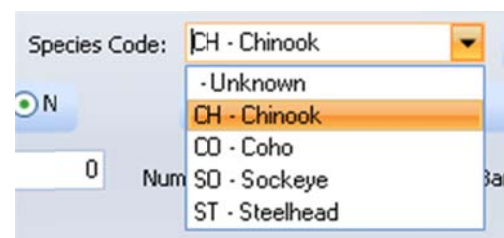
Field Name	Default Settings
Special species code	Default is none.
All number fields	All number fields are initially set to zero. These fields include number bypassed, number trucked, number barged.

Tank:

At **LGS**, **LMN**, and **MCN** choose “**A**” or “**B**” to designate the correct tank. Choose “**N/A**” to designate fish from the separator. The Tank toggle has been turned off for **LGR**.

Species Code:

Click on the **Species Code** drop down list and choose the appropriate species code from the list.



Special Species Code:

Click on the **Special Species** drop down list and choose one of the following codes:

- “**FR**” and “**EF**”. See **Section VIII.B.1** for a detailed discussion of each of these **Special Species Codes**.
- Due to NOAA sampling at **LGR**, entering separate records for **Eroded Fin** “**EF**” steelhead is not possible. The only **Special Species Code** to be used at **LGR** is “**FR**” for **Fry**.

Age Code:

Age Code is used for **Chinook** only. Choose “**0**” for subyearlings and “**1**” for yearlings. For other species this field is unavailable.

Fin Clipped:

Choose “**Y**” if the fish has an adipose or ventral fin clip. Choose “**N**” if there are no adipose or ventral fin clips.

CWT:

Choose “**Y**” if there is a coded wire tag and you have been requested by FPC to check for a coded wire tag on that particular species. Choose “**N**” only if you have checked for a coded wire tag and there is there is not a tag. Otherwise choose “**N/A**”.

Num Bypassed:

Enter the number of fish bypassed for each **Species Code**, **Age Code**, **Tank**, **Special Species** (EF and Fry), **Clipped/Unclipped**, and **CWT** combination. See **Section VII.I** for a detailed discussion of how to get these numbers from FPC32.net reports.

Num Trucked:

Enter the number of fish trucked for each **Species Code**, **Age Code**, **Tank**, **Special Species** (EF and Fry), **Clipped/Unclipped**, and **CWT** combination. See

Section VII.I for a detailed discussion of how to get these numbers from FPC32.net reports.

Num Barged:

Enter the number of fish barged for each **Species Code, Age Code, Tank, Special Species** (EF and Fry), **Clipped/Unclipped**, and **CWT** combination. See **Section VII.I** for a detailed discussion of how to get these numbers from FPC32.net reports.

VIII.E.2 – Editing or Deleting Transportation Records:

You can only edit one record from the **Transportation** data entry tab at a time. To edit a record, double-click on the record you wish to edit. The data entry panel (top of screen) is populated with that record's data. At this point, edits can be made to the record. Once edits are made, choose the **Save** button. If no edits are necessary, choose the **Cancel** button.

To delete a record, single-click on the record you wish to delete and choose the **Delete** button. You will get a prompt confirming that the record is to be deleted, select **Yes** and that record will be removed from the local database.

VIII.F. Conditions Tab.

The **Conditions** data entry tab allows users to edit/browse individual fish from the condition sub-sample that were entered through the touch screen. For convenience, the **Sub-batch, Sequence, Tank, Species/Age Code, Special Species Code, Coded Wire Tag, Mark Type** (clip code), and **Elastomer Code** are frozen on the left side of the data grid to help the user identify the row as they scroll to the right.

VIII.F.1 – Definitions and Data Entry

Before any data can be entered or edited in the **Conditions** data entry tab, the user must specify which batch they intend to add/edit data to by selecting the corresponding batch in the **Catch** data entry tab. Once a batch has been selected in the **Catch** tab, you may navigate to the **Conditions** data entry tab.

To enter new fish condition records through the **Conditions** tab, choose **New**. Enter a fish condition record for an individual fish and choose the **Save/New** button. Upon entering your last entry, you must choose the **Cancel** button after choosing **Save/New** for that record. **Subbatch, Species** and **Length** are required for each individual fish condition record.

To edit a record, double-click on the record you wish to edit. Each record has a sequence number to make the editing process easier for the user. The data from the record then populate the data entry panel at the top of the screen and are editable. Once necessary changes are made, choose the **Save** button. For ease of navigation, the **Tab Keys** can be used to move between fields and **Right and Left arrow keys** can be used to move the cursor within a data field.

Remote SMP Site Data Entry Program

File Reports

Fish Condition

Catch Catch Detail Incidental Catch Mark Recaptures Transportation Conditions Summary Cond.

Site: LGS Sub Batch: 2 Species Code: ST Tank/Trap: A B None Cwt: Y N None

Batch: 09138 Sequence: 74 Species: Choose Species Code... Special Species: - n/a

Miscellaneous Incidental: Choose Species Code...

Mark Type: AD - Adipose Elast. Code: - N/A Color Code: - N/A

Descaling: - N/A Gen. Comment:

Weight: 37.7 Length: 170

Predator: ☐ Bird ☐ Fish ☐ Lamprey

Injury: ☐ Head ☐ Eye ☐ Operc. ☐ Body ☐ Fin

☐ Pop Eye ☐ Fin Hemm. ☐ Pink Fin ☐ Fin Discol. ☐ Eye Hemm.

Disease: ☐ Fungus ☐ Columnaris ☐ BKD ☐ Parasite ☐ Deformity ☐ Other

Special Comment:

Subbat	Sequen	Tank	Edit	Species	Clip Code	CWT	Special species	Elast	Color	Weight	Length	Descal
1	1	A	<input type="checkbox"/>	CH1	AD		LF			24.1	138	
2	75	B	<input type="checkbox"/>	CH1	AD					18.5	129	
2	74	B	<input type="checkbox"/>	ST	AD					37.7	170	
2	73	B	<input type="checkbox"/>	ST	AD					112.4	233	
2	72	B	<input type="checkbox"/>	ST	AD					92	212	
2	71	B	<input type="checkbox"/>	ST	AD					73.1	201	
2	70	B	<input type="checkbox"/>	ST	AD					137.4	242	
2	69	B	<input type="checkbox"/>	ST						51.4	181	

Record Count: 216

New Save Cancel Edit Delete Select All Clear All

Below is a table of the fields of data that are entered into the **Conditions** data entry tab along with the default settings for each field, prior to data entry. Following this table is a list of the fields and instructions of the types of data that should be entered into each field and how.

Field Name	Default Settings
Site	Set in setting dialog
Sequence	For each subbatch, sequence starts at 1 and continues sequentially. When a new subbatch is started, sequence starts over at 1
Sub-batch	Starts at 1. The value of subbatch for the next record is the same as the previous entry, until the user changes the value.
Tank/Trap	Default is none. The value of tank for the next record is the same as the previous entry, until the user changes the value.
Species Code	Default is none. Species code is populated when the user chooses a value from the Species or Miscellaneous Incidental pull down menus.
Age	Default is none. This field is only used for Chinook.
Mark type	Default is none.
Coded Wire Tag	Default is none.
Special species code	Default is none.
Elastomer code	Default is none.
Color code	Default is none.
Descaling	Default is none.
Weight	Weight is a number field and is initially set to blank. The user may enter a weight to the nearest 10th of a gram (up to 100 grams)

Field Name	Default Settings
Length	Length is a number field and is initially set to blank. The user may enter a fork length to the nearest millimeter (up to 1,000 millimeters)
Comment Fields	General Comment and Special Comment are text fields. Users can put up to two comments into these fields, with a semicolon separating the different comments.

Site and Batch:

The **Site** and **Batch** fields cannot be edited. They are set in the **Setting** dialog box. **Site** contains the three character code for the remote site entering the daily batch, sub batch and fish condition data. The batch number contains: two digits for the year and three digits for the day of the year 1-366 (YYDDD).

Sub Batch:

This is the sub-batch number associated with each individual fish. Each sub-batch has an individual sample rate. Sample rates for each sub-batch are entered under the **Catch Detail** tab.

Tank:

At **LGS**, **LMN**, and **MCN** choose “**A**” or “**B**” to designate the correct tank. Choose “**N/A**” to designate fish from the separator.

Species Code:

Click on the **Species Code** drop down list and choose the appropriate **Species Code** from the list and the **Species Code** field will be populated. **Species Code** is a required field and is intended to be used for target salmonid species. For Chinook, the species code includes the age of the individual sampled, with “**CH1**” for Chinook yearling and “**CH0**” for Chinook subyearling.

Species list for LGR, LGS, and LMN

Species list for BON, JDA, and MCN
(incorporating lamprey juveniles)

Miscellaneous Incidental:

The **Miscellaneous Incidental** codes include several non-salmonid incidental fish codes. This drop down menu options are listed alphabetical by incidental species name, NOT incidental species code.

Incidental Code	Incidental Species Name	Incidental Code	Incidental Species Name
BM	Bass, Large Mouth	SC	Sculpin species
BS	Bass, Small Mouth	SA	Shad Adult
BL	Bluegill and Pumpkinseed	SJ	Shad Juvenile
BH	Bullhead	RS	Shiner, Redside
CP	Carp	SP	Siberian Prawn
CC	Channel Cat	SK	Stickleback, 3 Spine
CM	Chiselmouth	SN	Sturgeon, Green
UM	Chum	SG	Sturgeon, White
CR	Crappie species	BU	Sucker, Bridgelip
LD	Dace – Long Nose	LU	Sucker, Largescale
SD	Dace – Speckled	MU	Sucker, Mountain
BK	Killifish, Banded	SU	Sucker, Other
LK	Lamprey Adult (Brook)	TT	Tench
LP	Lamprey Adult (Pacific)	BT	Trout – Brook
LR	Lamprey Adult (River)	NT	Trout – Brown
MA	Madtom, Tadpole	LT	Trout – Bull
OT	Other species not listed	CT	Trout – Cutthroat
PM	Peamouth	RT	Trout – Rainbow
PE	Perch	WE	Walleye
SQ	Pike Minnow, Northern	WA	Warmouth
PI	Salmon, Pink (juv)	LW	Whitefish – Lake
SR	Sand Roller	MW	Whitefish - Mountain

Notes:

- If you see a **Bull Trout “LT”**, it is important that you minimize handling and return it to the river as soon as possible.
- If you encounter an “Other Species, **OT**”, be sure to indicate what this was in your comment(s) for the batch (**Catch Tab**).

Special Species Code:

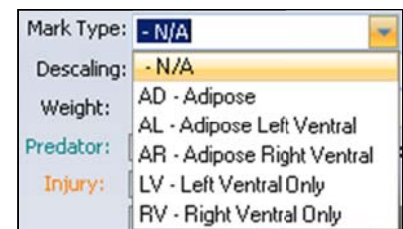
Click on the **Special Species** drop down list and choose one of the following codes “**EF**”, “**LF**” and “**HO**”. See **Section VIII.B.1** for a detailed discussion of each of these **Special Species Codes**.



Note: SMP sites no longer take condition data for **Fry “FR”**. Therefore, “**FR**” is no longer an option in this drop down list. All Fry sampled should be entered as non-condition fish, using the **Catch Detail** tab.

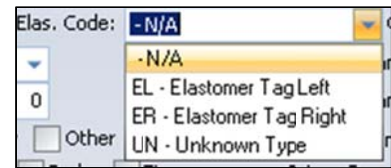
Mark Type:

The **Mark Type** drop down list includes choices for what type of clip a fish has (adipose, adipose and left ventral, etc.). Use “**N/A**” if individual condition fish does not have any type of clip.



Elas. Code:

The **Elas. Code** drop down list includes choices for a fish with an **Elastomer** tag and its location.



Color Code:

The **Color Code** drop down list allows the user to choose the color of the **Elastomer** tag.

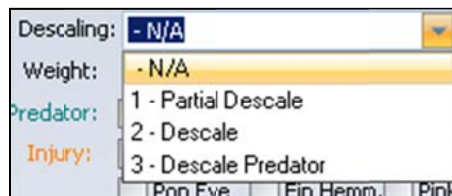


Descaling:

The **Descaling** drop down list includes three choices for descaling including:

- **Partial Descale** for fish with descaling greater than 5% but less than 20%
- **Descale** for fish that are >20% descaled
- **Descale Predator** for fish that are descaled and have clear predator marks.

NOTE: If **Descale Pred** is chosen, at least one of the Predator check-boxes should be checked (see **Predator Checkboxes** below)



Weight:

Enter the weight of the fish in the **Weight** field. Weight is NOT a mandatory field for condition fish. Weight is measured in grams and can range from 0.1 to 999.9 grams. Weights are accepted to the nearest tenth of a gram.

Species Code	Weight Range
CH0	0 to 150
CH1	0 to 150
ST	0 to 375
SO	0 to 199
CO	0 to 175
MP, AP, AS, AB	0 to 20

FPC32.net has pre-defined weight ranges for each of the condition monitoring target species. If a weight is entered that is outside of this range, the record can still be saved. However, when these data are imported into the **Condition** tab, the suspect value will appear **Red** in the **Data Review Grid**. This is intended to alert the user to an anomalous weight. It is up to the user to decide if this weight is wrong or acceptable. The table above provides the pre-defined weight ranges that are used for data validation for each of the target species.

Length

Enter the fork length of the fish in the **Length** field. **Length is a required field for condition fish (except miscellaneous incidentals).** Length is measured to the nearest millimeter and can range from 1 to 999 mm FL (no decimal place is allowed for length).

Species Code	Length Range
CH0	61 to 250
CH1	61 to 250
ST	61 to 350
SO	61 to 200
CO	61 to 250
MP, AP, AB	70 to 250
AS	30 to 75

FPC32.net has pre-defined length ranges for each of the condition monitoring target species. If a length is entered that is outside of this range, the record can still be saved. However, when these data are imported into the **Condition** tab, the suspect value will appear **Red** in the **Data Review Grid**. This is intended to alert the user to an anomalous length. It is up to the user to decide if this length is wrong or acceptable. The table above provides the pre-defined length ranges that are used for data validation for target species.

- If an anomalous length is identified for an individual record as part of the validation process, delete this anomalous length and leave the length field blank (as opposed to attempting to correct the length). Once the length is deleted, a **Length-value Alert Button** will flash **Red** next to the length field.
- If anomalous lengths are deleted from condition fish, the field will have a value of 0. If your on-site databases use these length data, you will need to be sure to filter these 0's out before calculating summary statistics.

The screenshot shows the 'Fish Condition' form with various input fields. The 'Length' field, containing the value '170', is circled in red. Other visible fields include Site (LGS), Sub Batch (2), Species Code (ST), Tank/Trap (A, B, None), Cwt (Y, N, None), Batch (09138), Sequence (74), Mark Type (AD - Adipose), and several checkboxes for Predator, Injury, and Disease.

Predator Checkboxes:

There are three checkboxes found near the **Predator** label. These include: **Bird**, **Fish**, and **Lamprey**. If a fish has marking due to a predator or predators, check all of the boxes that apply.

NOTE: Detailed definitions of each of these predator conditions are provided in a separate manual.

This screenshot is identical to the one above, but the three checkboxes under the 'Predator' label—'Bird', 'Fish', and 'Lamprey'—are circled in red. The 'Length' field is no longer circled.

Injury Checkboxes:

There are five checkboxes found near the **Injury** label. These include: **Head**, **Eye**, **Operc.**, **Body**, and **Fin**. Check all of the boxes that apply for an injured fish. If a fish has specific and/or other injuries that site personnel want to record, use the **Special Comment** field.

TIP: To save time, when entering a comment into the **Special Comment** field, use predefined codes for particular conditions. Also, up to two comments can be entered into this field, as long as they are separated by a semicolon.

NOTE: Detailed definitions of each of these injuries are provided in a separate manual.

The screenshot shows the 'Fish Condition' form with the 'Conditions' tab selected. The 'Injury' section, which includes checkboxes for Head, Eye, Operc., Body, and Fin, is circled in red. Other visible fields include Site (LGS), Sub Batch (2), Species Code (ST), Tank/Trap (A, B, None), Cwt (Y, N, None), Batch (09138), Sequence (74), Species (Choose Species Code...), Special Species (- n/a), Miscellaneous Incidental (Choose Species Code...), Mark Type (AD - Adipose), Elas. Code (- N/A), Color Code (- N/A), Descaling (- N/A), Weight (37.7), Length (170), Gen. Comment, and Special Comment.

Disease Checkboxes:

There are six checkboxes found near the **Disease** label. These include: **Fungus**, **Columnaris**, **BKD**, **Parasite**, **Deformity**, and **Other**. Check all boxes that apply for a diseased fish. If the fish has a disease other than one of these, check the **Other** box and type in a comment in the **Special Comment** field.

TIP: To save time, when entering a comment into the **Special Comment** field, use predefined codes for particular conditions. Also, up to two comments can be entered into this field, as long as they are separated by a semicolon.

NOTE: Detailed definitions of each of these diseases are provided in a separate manual.

The screenshot shows the 'Fish Condition' form with the 'Conditions' tab selected. The 'Disease' section, which includes checkboxes for Fungus, Columnaris, BKD, Parasite, Deformity, and Other, is circled in red. Other visible fields include Site (LGS), Sub Batch (2), Species Code (ST), Tank/Trap (A, B, None), Cwt (Y, N, None), Batch (09138), Sequence (74), Species (Choose Species Code...), Special Species (- n/a), Miscellaneous Incidental (Choose Species Code...), Mark Type (AD - Adipose), Elas. Code (- N/A), Color Code (- N/A), Descaling (- N/A), Weight (37.7), Length (170), Gen. Comment, and Special Comment.

Other Conditions Checkboxes:

There are five checkboxes that are designated as **Other Conditions**. These include: **Pop Eye**, **Fin Hemm.**, **Pink Fin**, **Fin Discol**, and **Eye Hemm.**. Check all of the boxes that apply.

NOTE: Detailed definitions of each of these diseases are provided in a separate manual.

General Comment:

Enter any specific comments about the fish that you may think are important and have not been entered into the **Special Comment** field.

TIP: To save time, when entering a comment into the **General Comment** field, use predefined codes for particular conditions. Also, up to two comments can be entered into each comment field, as long as they are separated by a semicolon.

VIII.F.2 – Editing or Deleting Condition Records:

To edit a single record in the **Conditions** data entry tab, double-click on the record you wish to edit. The data entry panel (top of screen) is populated with that record's data. At this point, edits can be made to the record. Edits should only be made to these records when you are absolutely sure that there was an error in data entry. For example, if an anomalous length is identified for an individual record, delete this anomalous length and leave the length field blank (as opposed to attempting to correct the length). Once edits are made, choose the **Save** button. If no edits are necessary, choose the **Cancel** button.

FPC32.net also allows the user to edit the **Sub-batch** number and/or **Tank** for multiple records at once. To do this, first check the box in the **Edit** column of the data grid for all the records you wish to edit. Second, select the **Edit** button. Change the **Sub-batch** and/or **Tank** to the correct value for the records to be edited. Press the **Update Sub-batch** button to edit the sub-sub-batch for the records and/or the **Update Tank/Trap** button to edit the **Tank/Trap** for the records.

Disease: ☐ Fungus ☐ Columnaris ☐ BKD ☐ Parasite ☐ Deformity ☐ Other

Subbat	Sequen	Tank	Edit	Species	Clip Code	CWT	Special species	Elast	Color	Weight	Length	Desc
	1	1 A	<input type="checkbox"/>	CH1	AD		LF			24.1	138	
	2	75 E	<input checked="" type="checkbox"/>	CH1	AD					18.5	129	
	2	74 E	<input checked="" type="checkbox"/>	ST	AD					37.7	170	
	2	73 E	<input checked="" type="checkbox"/>	ST	AD					112.4	233	
	2	72 E	<input checked="" type="checkbox"/>	ST	AD					92	212	
	2	71 E	<input type="checkbox"/>	ST	AD					73.1	201	
	2	70 E	<input type="checkbox"/>	ST	AD					137.4	242	
	2	69 E	<input type="checkbox"/>	ST						51.4	181	

New Subbatch: 3 New Tank/Trap: ☒ A ☐ B ☐ None

To delete a record, single-click on the record you wish to delete and choose the **Delete** button. You will get a prompt confirming that the record is to be deleted, select **Yes** and that record will be removed from the local database.

VIII.G. Summary Cond. Tab.

The **Summary Cond.** tab allows users to view summarized fish condition records that are grouped by key fields (listed below) for promotion into the **Catch Detail**, **Incidental Catch**, and **Mark Recaptures** tabs. The condition fish in the data grid are grouped by: **Sub-batch**, **Tank**, **Species**, **Clip Code**, **CWT**, **Special Species**, **Elastomer tags**, and **Elastomer tag colors**. Upon promotion, the **Catch Detail**, **Incidental Catch**, and **Mark Recaptures** tabs all receive different subsets of these summarized condition data. For example, the records for the incidental species are only promoted to the Incidental **Catch** tab. Clicking the **Promote All** button adds the summarized records to the appropriate data entry tab. For convenience, the **Sub-batch**, **Tank**, **Species**, **Clip Code**, **CWT**, **Special Species**, **Elast.**, and **Color** codes are frozen on the left to help the user identify the row as they scroll to the right.

VIII.G.1 – Definitions

No data are entered or edited into the **Summary Cond.** tab. This tab is specifically used to promote the condition fish data into the **Catch Detail**, **Incidental Catch**, and **Mark Recaptures** data entry tabs. Before promoting, the user must specify which batch they intend to promote data for by selecting the corresponding batch in the **Catch** data entry tab. Once a batch has been selected in the **Catch** tab, you may navigate to the **Summary Cond.** data entry

tab. Upon successful promotion, the user will hear a prompt and see a red push-pin icon in the upper-right of their screen.

The screenshot shows the 'Remote SMP Site Data Entry Program' window. The 'Summary Fish Condition' tab is active. The interface includes a menu bar (File, Reports), a tab bar (Catch, Catch Detail, Incidental Catch, Mark Recaptures, Transportation, Conditions, Summary Cond.), and a main data area. On the left, there are input fields for 'Site' (LGS), 'Batch' (09138), and 'Sub Batches'. The 'Sub Batches' section displays a table with columns 'Sub...', 'Sample R...', and 'Ge...'. The 'Conditions' section displays a table with columns 'Subbatch', 'Sample Rate', and 'Editable'. A 'Promote All' button is located on the right. The main data table has columns: Subbat, Tank, Species, Clip Code, CWT, Special species, Elast, Color Code, Avg length, Num samp, Eye, PopEye, and Open. The table contains 15 records, with the first record highlighted in yellow. The status bar at the bottom indicates 'Record Count: 15'.

Subbat	Tank	Species	Clip Code	CWT	Special species	Elast	Color Code	Avg length	Num samp	Eye	PopEye	Open
1	A	CH1						120	10	0	0	0
1	A	CH1		Y				141	2	0	0	0
1	A	CH1		Y	LF			114	1	0	0	0
1	A	CH1	AD					137	104	3	0	0
1	A	CH1	AD		LF			140	7	0	0	0
1	A	ST						178	4	0	0	0
1	A	ST	AD					184	13	0	0	0
2	B	CH0						65	1	0	0	0
2	B	CH1						112	1	0	0	0
2	B	CH1		Y				136	1	0	0	0
2	B	CH1	AD					138	20	0	0	0
2	B	CO						132	1	0	0	0

Below is a list of the fields and instructions of the types of data that can be found in each field.

Site and Batch:

The **Site** and **Batch** fields cannot be edited. **Site** is set in the **Setting** dialog box. **Batch** is set when data entry for the batch is first started, generally with the touch screen. **Site** contains the three character code for the remote site entering. The **Batch** number contains: two digits for the year and three digits for the day of the year 1-366 (YYDDD).

Catch Detail Sub Batches:

The current selected batch's sub-batch numbers and associated sample rates are displayed in this small data grid at the top of the tab window. These data are not editable. It is for reference only. During entry of the non-condition samples into **Catch Detail**, the user entered a sample rate for each of the sub batches from which data were entered. This data grid allows the user to see these non-condition sub-batches and their corresponding sample rates. This is helpful because it indicates what sample rate(s) will be applied to the condition records upon promotion. This data grid will only be populated if data for non-condition fish were entered into **Catch Detail**, it is otherwise blank.

Conditions Sub-Batches:

When entering condition data via the touch screen, the user enters a sub-batch number for each fish condition record. The sub-batch numbers for the condition fish are listed in this data grid, along with the corresponding default sample rate that was assigned to these sub-batches, as entered in the **Settings** tab. If data for non-condition fish were entered into **Catch Detail**, the sample rate(s) entered into **Catch Detail** will automatically overwrite these condition sample rates.

Note: If all fish sampled were condition fish, the user must check to make sure the default sample rates from the **Settings** tab were correct for this batch before promoting condition fish into the **Catch Detail**, **Incidental Catch**, and **Mark/Recap** tabs. To correct them, right-click in the **Sample Rate** cell in the **Condition Sub-Batches** box at the top of the screen (**A in the figure below**). This allows you to manually enter the sample rate for that particular sub-batch (must be between 0.0 and 1.0). You will be prompted with a message asking if you want this sample rate to be applied to all records of this sub-batch. Click **Yes**. Once this is done for each of the sub-batches, click on the **Promote All** button. When condition sample data are incorporated into the **Catch Detail** tab, the sample counts for condition fish will appear in the **Cond. Sample Count** field of the data grid.

If data were entered in **Catch Detail**, the sample rates in the two review grids must match for each of the sub-batches. If you notice that the sample rate in either of these two data grids do not match, you must change the sample rate in **Catch Detail**. See **Section VIII.B.1** above for instructions on how to do this.

The screenshot shows the 'Remote SMP Site Data Entry Program' window. The 'Summary Fish Condition' tab is active, and the 'Conditions' sub-tab is selected. The 'Conditions Sub Batches' box contains a table with the following data:

Subbatch	Sample Rate	Editable
2	0.2	No
1	0.01	No

A red arrow points to the 'Sample Rate' cell for Subbatch 1, which is labeled with a red 'A'. The 'Promote All' button is visible to the right of the table.

VIII.H. Fish Condition Touch Screen.

The **Fish Condition Touch Screen** allows users to enter individual fish condition data.

To open the touch screen to enter fish condition records for a new batch (with the **Setting dialog Fish Condition Touch Screen Only** checkbox checked), double-click on the **FPC32.net** icon. The touch screen will open on the computer's desktop.

To open the touch screen to enter fish condition records using an existing batch record: (with the **Setting dialog Fish Condition Touch Screen Only** checkbox unchecked) double-click on the **FPC32.net** icon. Right click on the **FPC32.net** icon in the system tray and choose **Open Main Form**. From the **Main Form**, choose the

Catch data entry tab and select the batch you want to work with. **Choose File | Open Condition Touch Screen.**

VIII.H.1 – Data Entry Sequence for the Fish Condition Touch Screen:

1. Open the fish condition touch screen. A dialog box appears with three buttons: 1) **The Batch End Day Today** button creates a batch with the end-date corresponding to today's date, 2) the **Batch End Day Tomorrow** button creates a batch with the end-date corresponding to tomorrow's date, and 3) the **Batch End Day Yesterday** creates a batch with the end-date corresponding to yesterday's date.



2. Click on the appropriate **Batch End Day** button to create the desired batch. If a batch already exists with any of these end-dates, a push-pin icon appears next to the already existing batch's **Batch End Day** button. Once you have done this, the **Fish Condition Touch Screen** will appear.

L-Blue	L-Red	L-Green	L-Orange	L-Yellow	L-Pink	L-Purple	L-Other	Gen. Comments	Clr. Gen. Comments
R-Blue	R-Red	R-Green	R-Orange	R-Yellow	R-Pink	R-Purple	R-Other	Subbatch	Clr. Subbatch
Fungus	Columnaris	BID	Parasite	Deformity	Other		Special Comments	Tank A	Tank B
Head Inj.	Eye Inj.	Opirc.	Body Inj.	Fin Inj.	Eye Hemm.	Pop Eye	Fin Hemm.	Pink Fin	Fin Discol.
Partial Descale	Descale	Descale Pred.			Bird	Fish	Lamprey		
Clr. Mark	LV	RV	CWT			Enter Weight	Clr. Weight	Enter Length	Clr. Length
CH1-AD	CH0-AD	ST-AD	CO-AD	SO-AD	HO	EF			
CH1	CH0	ST	CO	SO	LF		Misc. Incidental Species		

Tank A and None Clip/Uncip Tally:

CH1:	0	/	0
CH0:	0	/	0
ST:	0	/	0
CO:	0	/	0
SO:	0	/	0
Total:	0	/	0

Tank B Clip/Uncip Tally:

CH1:	0	/	0
CH0:	0	/	0
ST:	0	/	0
CO:	0	/	0
SO:	0	/	0
Total:	0	/	0

Special Species Tally:

Tank:	A	B	None
Total Ho:	0	0	0
Total EF:	0	0	0
Total LF:	0	0	0

Total Incidental: 0
Total Sampled: 0

Please enter Tank/Trap

Tank/Trap: ☐ Species: S. Species: Clip Code:

Elast: Color: CWT: Gen. Comment:

Predator: Weight: Length:

Injury: Other cond.: Disease:

Site: **LGS** Batch: **10044** 2/13/2010 S/batch: **1** Sequence: **1**

7	8	9	CE	Edit	Delete
4	5	6	.	Save/New	Next
1	2	3	0	Cancel	Exit Panel

Touch screen for LGR, LGS, and LMN

L-Blue	L-Red	L-Green	L-Orange	L-Yellow	L-Pink	L-Purple	L-Other	Gen. Comments	Clr. Gen. Comments
R-Blue	R-Red	R-Green	R-Orange	R-Yellow	R-Pink	R-Purple	R-Other	Subbatch	Clr. Subbatch
Fungus	Columnaris	BKD	Parasite	Deformity	Other		Special Comments	Tank A	Tank B
Head Inj.	Eye Inj.	Opirc.	Body Inj.	Fin Inj.	Eye Hemm.	Pop Eye	Fin Hemm.	Pink Fin	Fin Discol.
Partial Descale	Descale	Descale Pred.			Bird	Fish	Lamprey		
Clr. Mark	LV	RV	CWT		Enter Weight	Clr. Weight	Enter Length	Clr. Length	EF
CH1-AD	CH0-AD	ST-AD	CO-AD	SO-AD	AB	AS		HO	
CH1	CH0	ST	CO	SO	AP	MP		LF	

Tank A or None Clip/Uncip Tally:

CH1:	8	/	0
CH0:	12	/	22
ST:	3	/	2
CO:	0	/	2
SO:	1	/	4
/ AB:	0	AS:	0
/ AP:	0	MP:	1
Total:	24	/	31

Tank B Clip/Uncip Tally:

CH1:	13	/	7
CH0:	12	/	9
ST:	3	/	3
CO:	0	/	11
SO:	4	/	9
/ AB:	0	AS:	0
/ AP:	1	MP:	1
Total:	32	/	41

Special Species Tally:

Tank:	A	B	None
Total Ho:	0	0	0
Total EF:	0	1	0
Total LF:	0	0	0
Total Incidental:			3
Total Sampled:			131

Tank/Trap: **B** Species: **AP** S. Species: Clip Code:

Elast: Color: CWT: Gen. Comment:

Predator: Weight: Length: **100**

Injury: Other cond.: Disease:

Site: **MCN** Batch: **11153** 2/3/2012 S/batch: **1** Sequence: **131**

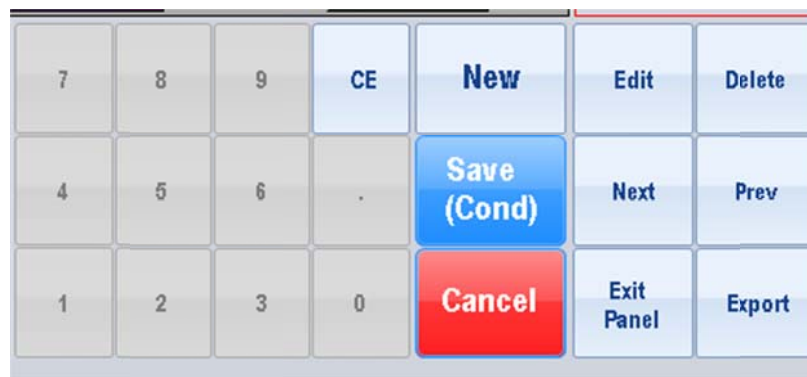
7	8	9	CE	New	Edit	Delete
4	5	6	.	Save (Cond)	Next	Prev
1	2	3	0	Cancel	Exit Panel	Export

Touch screen for BON, JDA, and MCN (incorporates condition monitoring for lamprey juveniles).

3. Press **New**. The background panel turns white, meaning that the computer will accept data. If the background panel is gray, the computer will beep when you press a button because it is not in the **New** or **Edit** mode.
4. Where applicable, select the **Tank** for the sub-batch you are currently sampling.
5. Turn **On** the scale and add the tray (the scale automatically tares or calibrates to compensate for the weight of the tray), place the fish in the tray, and press the **Print** button on the scale.
Note: You do not need to place the tray on the scale between fish but you may need to **Tare** the scale occasionally between fish)
6. Enter the fish **Length** using the touch screen number pad.
7. Press the appropriate **Species**, **Clip**, **Condition**, and **Tagging** buttons.
8. If a **Special Comment** needs to be entered, press the **Special Comment** button and type the comment using the touch screen keyboard. The user can only enter two comments or codes in this field, each separated by a semicolon.
9. If a **General Comment** needs to be entered, press the **General Comment** button and type the comment using the touch screen keyboard. The user can only enter two comments or codes in this field, each separated by a semicolon.
10. Press the **Save/New** button to save the individual fish record and start on the next fish.
11. Return the fish to the bypass to where ever it needs to go.
12. Repeat **Steps 4 through 9** for each subsequent fish.
13. After the record for the last fish is saved, you must choose the **Cancel** button prior to exporting data.

VIII.H.2 – Fish Condition Touch Screen – Function Buttons

These function buttons appear in the lower center and right corner of the touch screen. The following describes the functions of each of the buttons in this section of the touch screen.



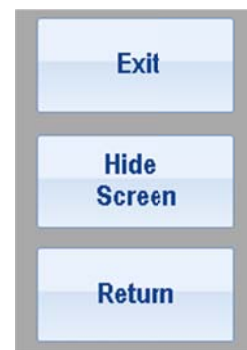
Number Pad:

The focus of the number pad is automatically set to the length field for entering fish lengths. To change the focus of this number pad to the weight field, the user must select either **Enter Weight** or **Clear Weight**. If a comment button is chosen,

numbers can be entered into the comment field by using this number pad. The CE button clears the number that are in the field that is currently in focus.

Exit Panel:

When the **Exit Panel** button is chosen, a pop-up menu will appear. This pop-up menu has three options: **Exit**, **Hide Screen**, and **Return**. Choose **Exit** to exit the touch screen and close the **FPC32.net** program. Choose **Hide Screen** to close the touch screen and return to the **Main Form**. Choose **Return** to return to the touch screen for additional data entry.



New:

The **New** button allows the user to enter new records. After pressing the **New** button, the background panel turns white and the **New** button disappears, indicating that data entry is allowed. Once the first record has been entered the user must press the **Save/New** button to save the record.

Save/New:

The **Save/New** button allows the user to save the current record and automatically starts a new record for the next fish. The **Sub-batch** and **Tank** of the previous record automatically appear for each new record. You must correct the **Sub-batch** and/or **Tank** each time you switch **Sub-batches** or **Tanks**.

Edit:

The **Edit** button allows the user to edit the record shown in the record browsing panel (found in the lower left corner of the touch screen). After pressing the **Edit** button, the background panel turns white, indicating that data entry is allowed. Once editing is complete the user must press the **Save** button to save the changes to the record.

Delete:

The **Delete** button allows the user to delete the current record shown in the record browsing panel.

Next:

The **Next** button allows the user to navigate to the next record in the fish condition record set (each record is shown in the record browsing panel). The **Next** button cannot be used if a record is active (i.e., data entry/editing is allowed).

Previous:

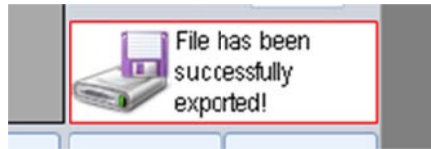
The **Previous** button allows the user to navigate to the previous record in the fish condition record set (each record is shown in the record browsing panel). The **Previous** button cannot be used if a record is active (i.e., data entry/editing is allowed)

Cancel:

The **Cancel** button is used to cancel entering a new record or to cancel editing a record.

Export

The **Export** button saves the condition records to an .XML file named with the site and batch number. The location where this file is saved is specified in the **Setting** dialog box for your wet lab computer. Upon successful export, the user will hear a prompt and see an icon under the data review panel.



VIII.H.3 – Fish Condition Touch Screen - Record Browsing Panel

The **Record Browsing Panel** of the **Fish Condition Touch Screen** is found in the lower left corner of the touch screen. This form displays the current record being entered (or edited) or it shows the last record entered.

Tank/Trap: A	Species: CH1	S.Species:	Clip Code: AD
Elast: ER	Color: RE	CWT:	Gen. Comment:
			Spec. Comment:
Predator: Fish	Weight: 12.5		
Injury: Opere.	Length: 124		
Other cond.: Fin Hemm.			
Disease: BKD.			
Site: LGS	Batch: 09138	S/batch: 1	Sequence: 141

The **Top Section (A in above figure)** of the **Record Browsing Panel** displays the **Tank/Trap**, **Species**, **Special Species**, **Clip Codes**, **Elastomer Code**, **Elastomer Color**, **CWT**, **General Comment**, and **Special Comment**.

Tank/Trap:

This will be either “**A**” or “**B**”, where applicable. If no **Tanks** are present, this field will be blank.

Species Code:

Species Code is a **Required Field** for condition fish. Therefore, the text box for **Species Code** will appear yellow when a new record is created, until a **Species Code** is chosen by the user. When a **Species Code** is chosen, this field will have the two letter code of that species. If the individual fish is a Chinook, there will be a third digit corresponding to the **Age Code** (“**0**” for subyearlings and “**1**” for yearlings). This field is used for target species and incidentals that are entered with the **Fish Condition Touch Screen**. For a detailed explanation of each of the **Species Codes**, see **Section VIII.B.1** (Target Species) and **Section VIII.C.1** (Incidental Species) above.

Special Species:

This field is where the **Special Species Code** is displayed. There are three possible **Special Species Codes** for condition fish: 1) “**HO**” for yearling Chinook holdovers, 2) “**EF**” for eroded fish steelhead, and 3) “**LF**” for Lyons Ferry yearling fall Chinook.

Clip Code:

This field is where any clip codes will be displayed. There are five possible clip codes: 1) “**AD**” for adipose clip, 2) “**LV**” for left ventral clip, 3) “**RV**” for right ventral clip, 4) “**AR**” for adipose and right ventral clip, and 5) “**AL**” for adipose and left ventral clip. This field is blank if the fish is not clipped.

Elastomer:

This field is where any **Elastomer** tag information is displayed. There are two possible codes for this field: 1) “**ER**” for an Elastomer tag on the right or 2) “**EL**” for an Elastomer tag on the left. This field is blank if the fish does not have an Elastomer tag.

Color:

This field is where the **Elastomer Tag Color** is displayed. Below is a list of the different color codes. This field is blank if the fish does not have an Elastomer tag.

BL – blue	RE – red
GR – green	OR – orange
YE – yellow	PI – pink
PU – purple	OT – other

CWT:

This field indicates the presence “**Y**” or absence “**N**” of a **Coded Wire Tag**. Currently, only **LGR**, **LGS**, and **LMN** examine condition fish for CWT. For these sites, the default value for **CWT** is “**blank**” for clipped Chinook, coho, and sockeye. The default value for **CWT** is “**N**” for unclipped Chinook, coho, and sockeye, unless the user enters “**Y**”. For steelhead, the default **CWT** is “**blank**”, regardless of clip status.

General Comment:

The user can enter **General Comments** about the fish when entering fish condition records. This is where these **General Comments** are displayed. Two separate comments can be entered, each separated by a semicolon.

Special Comment:

The user can enter **Special Comments** about the fish when entering fish condition records. This is where these **Special Comments** are displayed. Two separate comments can be entered, each separated by a semicolon.

The **Middle Section** (**B in above figure**) of the **Record Browsing Panel** is where the fish condition information is displayed. Fish condition information is divided into four types of conditions, including: 1) **Predator**, 2) **Injury**, 3) **Other Condition**, and 4) **Disease**. In addition to these conditions, there are fields for the **Weight** and **Length** of each condition fish.

Predator:

This row is where any **Predator** data are displayed. If any of the predator buttons are pushed, that predator type is displayed in this row. Possible entries in this row include: 1) **Bird**, 2) **Fish**, and 3) **Lamprey**.

Injury:

This row is where any **Injury** data are displayed. If any of the injury buttons are pushed, that injury will be displayed in this row. Possible entries in this row include: 1) **Head Injury**, 2) **Eye Injury**, 3) **Operculum Injury**, 4) **Body Injury**, and 5) **Fin Injury**.

Other Cond:

This row is where any **Miscellaneous Injuries** are displayed. If any of the misc. injury buttons are pushed, that misc. injury will be displayed in this row. Possible entries in this row include: 1) **Pop Eye**, 2) **Fin Hemorrhage**, 3) **Pink Fin**, 4) **Fin Discoloration**, and 5) **Eye Hemorrhage**..

Disease:

This row is where any **Disease** data are displayed. If any of the disease buttons are pushed, that disease will be displayed in this row. Possible entries in this row include: 1) **Fungus**, 2) **Columnaris**, 3) **BKD**, 4) **Parasite**, 5) **Deformity**, and 6) **Other**.

Weight:

The **Weight** field holds the weight (grams) of the fish that was entered via the scale. Even though **Weight** is **NOT** a **Required Field** for condition fish, the text box for **Weight** will appear yellow when a new record is created, until a **Weight** is entered by the user. There can be 5 digits in the weight field including three numbers before the decimal point, a decimal point, and one number after the decimal point. The weight field can have data values in the hundreds (up to 999.9 grams). Weight is not mandatory at **BO2** or **JDA**.

Length:

The **Length** field holds the length (millimeters) of the fish, which was entered via the number pad. **Length** is a **Required Field** for condition fish. Therefore, the text box for **Length** will appear yellow when a new record is created, until a **Length** is entered by the user. There can be 3 digits in the length field. There are no decimals in this field. Length can have data values in the hundreds (up to 999 mm). Length is mandatory at all sites where condition data are collected.

The **Bottom Section** (**C** in above figure) of the **Record Browsing Panel** displays the **Site**, **Batch**, **Date**, **S/batch**, and **Sequence** number.

Site:

This site field is where the **Site** is displayed. **Site** was chosen in the **Settings** dialog box.

Batch:

The **Batch** field is where the **Batch** number is displayed. This batch number is a five digit number, where the first two digits correspond to the year (e.g., 09) and the last three digits correspond to the sample end date in Julian Days. This number was generated based on which **Batch End Day** button that was selected when initially opening the touch screen.

Date:

The **Date** field is where the batch end date is displayed. The batch end date corresponds to which **Batch End Day** button was selected when initially opening the touch screen.

Sub-batch:

This field is where the **Sub-batch** number is displayed. Up to 999 sub-batches can be displayed in this field.

Sequence:

This field is where the **Sequence** number of the individual fish record is displayed. Each sub-batch starts with a sequence number of 1 and each record is incremented by one. If a record is deleted, that sequence number is deleted with it. The deleted sequence number cannot be used again in the current sub-batch.

VIII.H.4 – Fish Condition Touch Screen - Tallies

The **Touch Screen Tallies** are found in the upper right corner of the touch screen. These are the total number of condition fish that have been sampled. Condition fish are broken into several categories based on: 1) **Species**, 2) **Clipped/Unclipped**, 3) **Tank**, 4) **Special Species**, and 5) **Incidentals**

“Tank A and None” and “Tank B” Tallies (A in figure below): Each of the target salmonid species are tallied based on whether they were sampled in **Tank A** (or **None**) or **Tank B** and whether they were **Clipped** (**AD, RV, LV, AR, AL**) or **Unclipped**. If the site does not have a tank, the species/clip type tallies are displayed in the **Tank A and None** display.

Special Species Tallies (B in figure below):

Each of the **Special Species** are tallied based on whether they were sampled in **Tank A**, **Tank B**, or **None** (for those sites without tanks). These fish are included in the “**Tank and None**” and “**Tank B**” tallies above.

Total Incidental Tally (C in figure to below):

This tally is the total number of **Miscellaneous Incidental Species** that are entered via the touch screen.

Total Sampled Tally (D in figure below):

This tally is the total number of fish (**Salmonids** and **Miscellaneous Incidentals**) that have been entered via the touch screen for a single batch.

Tank A and None Clip/Unclip Tally:

CH1:	111	/	13
CH0:	0	/	0
ST:	13	/	4
CO:	0	/	0
SO:	0	/	0
Total:	124	/	17

Tank B Clip/Unclip Tally:

CH1:	20	/	2
CH0:	0	/	1
ST:	44	/	7
CO:	0	/	1
SO:	0	/	0
Total:	64	/	11

Special Species Tally:

	Tank: A	B	None
Total Ho:	0	0	0
Total EF:	0	1	0
Total LF:	8	0	0

Total Incidenta: 0

Total Sampled: 216

Tank A or None Clip/Unclip Tally:

CH1:	8	/	0
CH0:	12	/	22
ST:	3	/	2
CO:	0	/	2
SO:	1	/	4
/ AB:	0	AS:	0
/ AP:	0	MP:	1
Total:	24	/	31

Tank B Clip/Unclip Tally:

CH1:	13	/	7
CH0:	12	/	9
ST:	3	/	3
CO:	0	/	11
SO:	4	/	9
/ AB:	0	AS:	0
/ AP:	1	MP:	1
Total:	32	/	41

Special Species Tally:

	Tank: A	B	None
Total Ho:	0	0	0
Total EF:	0	1	0
Total LF:	0	0	0

Total Incidenta: 3

Total Sampled: 131

A
B

C
D

Touch screen tallies for LGR, LGS, and LMN for 2013

Touch screen tallies for BON, JDA, and MCN for 2013 (incorporates lamprey juveniles)

VIII.H.5 – Fish Condition Touch Screen – Condition, Species, and Mark Type Buttons

The condition, species, and mark type buttons on the **Fish Condition Touch Screen** are found in the upper left and central portion of the touch screen. These buttons are grouped in sections and some are also grouped by color. These buttons have many functions. Some of the buttons toggle on and off, some move the computer focus to a specific field, some clear a field or fields, some open a pop-up screen with additional selections, and some select the appropriate sub-batch and tank. The condition button groupings include: 1) **Elastomer Location and Color**, 2) **General Comments, Sub-batch, and Tank**, 3) **Disease/Parasite conditions**, 4) **Injuries**, 5) **Miscellaneous Conditions**, 6) **Descaling**, 7) **Predation**, 8) **Mark Types**, 9) **Length and Weight functions**, 10) **Species, Special Species, and Incidental Species codes**.

L-Blue	L-Red	L-Green	L-Orange	L-Yellow	L-Pink	L-Purple	L-Other	Gen. Comments	Clr. Gen. Comments
R-Blue	R-Red	R-Green	R-Orange	R-Yellow	R-Pink	R-Purple	R-Other	Subbatch	Clr. Subbatch
Fungus	Columnaris	BKD	Parasite	Deformity	Other		Special Comments	Tank A	Tank B
Head Inj.	Eye Inj.	Operc.	Body Inj.	Fin Inj.	Eye Hemm.	Pop Eye	Fin Hemm.	Pink Fin	Fin Discol.
Partial Descale	Descale	Descale Pred.			Bird	Fish	Lamprey		
Clr. Mark	LV	RV	CWT			Enter Weight	Clr. Weight	Enter Length	Clr. Length
CH1-AD	CH0-AD	ST-AD	CO-AD	SO-AD	HO	EF			
CH1	CH0	ST	CO	SO	LF			Misc. Incidental Species	

Touch screen species and conditions for LGR, LGS, and LMN. Note – LGR does not have Tank Buttons

L-Blue	L-Red	L-Green	L-Orange	L-Yellow	L-Pink	L-Purple	L-Other	Gen. Comments	Clr. Gen. Comments
R-Blue	R-Red	R-Green	R-Orange	R-Yellow	R-Pink	R-Purple	R-Other	Subbatch	Clr. Subbatch
Fungus	Columnaris	BKD	Parasite	Deformity	Other		Special Comments		
Head Inj.	Eye Inj.	Operc.	Body Inj.	Fin Inj.	Eye Hemm.	Pop Eye	Fin Hemm.	Pink Fin	Fin Discol.
Partial Descale	Descale	Descale Pred.			Bird	Fish	Lamprey		Misc. Incidental Species
Clr. Mark	LV	RV	CWT		Enter Weight	Clr. Weight	Enter Length	Clr. Length	EF
CH1-AD	CH0-AD	ST-AD	CO-AD	SO-AD	AB	AS			HO
CH1	CH0	ST	CO	SO	AP	MP			LF

Touch screen species and conditions for BON, JDA, and MCN (incorporating condition monitoring for lamprey juveniles). Note – MCN touch screen has buttons for Tank A and Tank B in same location as LGS and LMN touch screen.

Elastomer Location and Color:

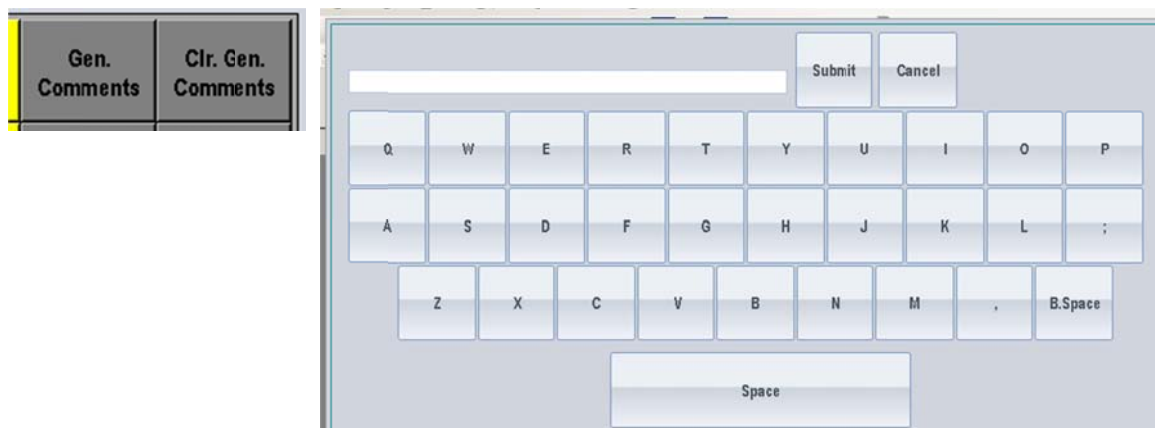
If the condition fish has an **Elastomer** tag, the user presses the appropriate **Color/Location** button. These buttons *toggle* on and off. If a user selects the wrong button, simply select the correct button or select the same button to remove that Elastomer, tag location, and tag color.

L-Blue	L-Red	L-Green	L-Orange	L-Yellow	L-Pink	L-Purple	L-Other
R-Blue	R-Red	R-Green	R-Orange	R-Yellow	R-Pink	R-Purple	R-Other

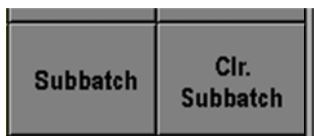
General Comments, Sub-batch, Tank, and Special Comments:

These buttons allow the user to enter the appropriate **Sub-batch**, **Tank**, and **Comments** for each individual fish.

When the user selects **Gen. Comments** a popup appears with the general comment text field and a keyboard. Users are allowed to enter two comments per field separated by a semicolon. Pressing **Submit** enters the comments into the database. The **Clr. Gen. Comments** button clears the **General Comments** text field.



When the user begins entering data, **Sub-batch** defaults to “1”. To change the **Sub-batch**, the user should push the **Sub-batch** button. Each time the **Sub-batch** button is pressed, the **Sub-batch** number increases by 1. If the user presses the **Sub-batch** button too many times, the user can press the **Clr Sub-batch** button to return the **Sub-batch** number to 1.



Where applicable, the user selects the **Tank A** or **Tank B** button for the appropriate tank. The **Tank A** and **Tank B** buttons *toggle* on and off. Once **Tank A** or **Tank B** is selected for a single fish, that tank is carried on to

subsequent fish until a different tank or sub-batch is chosen by the user. These Tank buttons are hidden for BO2, JDA, and LGR.



When the user selects **Special Comments** a popup appears with the general comment text field and a keyboard (see **General Comments** keyboard above). *The intent of this field is for sites to use it for other conditions that they would like to keep track of, but don't have buttons for.* It is recommended that sites come up with two-letter codes for these conditions and let FPC know what these codes are and what they stand for. FPC will use these codes with developing the site-specific tools for site-specific databases. Users are allowed to enter two comments per field separated by a semicolon. Pressing **Submit** enters the comments into the database.



Disease/Parasite Conditions:

These buttons allow the user to enter the following **Diseases/Parasites**: **Fungus**, **Columnaris**, **BKD**, **Parasite**, **Deformity** and **Other**. These condition buttons **toggle** on and off. If a button is pressed by mistake, simply press it again to make that disease/parasite go away. Users are allowed to choose as many **Diseases** as the fish has. *Definitions and examples of each of these Disease/Parasite conditions can be found in Condition Sampling Protocol document.*



Injury Conditions:

These buttons allow the user to enter the following **Injuries**: **Head Inj.**, **Eye Inj.**, **Operc.**, **Body Inj.**, and **Fin Inj.**. These condition buttons **toggle** on and off. If a button is pressed by mistake, simply press it again to make that injury go away. Users are allowed to choose as many **Injuries** as the fish has. *Definitions and examples of these Injury conditions can be found in the Condition Sampling Protocol document.*



Miscellaneous Conditions:

These buttons allow the user to enter the following **Miscellaneous Conditions**: **Pop Eye**, **Fin Hemm.**, **Pink Fin**, **Fin Discol.**, and **Eye Hemm.** These condition buttons **toggle** on and off. If a button is pressed by mistake, simply press it again to make that miscellaneous injury go away. Users are allowed to choose as many **Miscellaneous Conditions** as the fish has.

Definitions and examples of these Other conditions can be found in the Condition Sampling Protocol document.



Descaling:

These buttons allow the user to enter the following **Descaling Conditions**: **Partial Descal** (3% to 19% descaled), **Descal** ($\geq 20\%$ descaled), **Descal Pred** (descaled $\geq 20\%$ and clear predator marks). If the wrong descaling button is pressed by mistake, simply press it again to make that descaling go away or push a different descaling button to overwrite the erroneous selection with the correct selection. **Only one descaling type is allowed per fish record.** *Definitions and examples of these Descaling categories can be found in the Condition Sampling Protocol document.*



Predator Conditions:

These buttons allow the user to enter the following **Predation** conditions: **Bird**, **Fish**, and **Lamprey**. These condition buttons **toggle** on and off. If a button is pressed by mistake, simply press it again to make that **Predator** type go away. Users are allowed to choose as many **Predator** types as the fish has. *Definitions and examples of these Predation conditions can be found in the Condition Sampling Protocol document.*



Mark Types:

These buttons allow the user to enter the following mark types: **LV** (left ventral), **RV** (right ventral), and **CWT** (coded wire tag).



For those sites that examine Chinook, Coho, and Sockeye for coded-wire-tags, the **CWT** button is only pressed when an unclipped fish has a CWT. This will place a “Y” in the **Record Browsing Panel**. For these species, the default **CWT** in the **Record Browsing Panel** is “N”. If the **CWT** button is pressed by mistake, simply press it again to **toggle** it to the off “N” position.

The **LV** and **RV** buttons are pressed with a fish has a **Left Ventral Clip “LV”** or a **Right Ventral Clip “RV”**. If a fish has both a ventral clip and an adipose clip, the user would first select the adipose clip by selecting the corresponding Species-AD button (see below). Then the user would select the corresponding Ventral Clip button (**LV** or **RV**). When this is done, the **Clip Code** in the **Record Browsing Panel** will display an “**AR**” (**Adipose-Right Vent**) or “**AL**” (**Adipose-Left Vent**). For example, for a subyearling Chinook with an adipose clip and a left ventral clip, the user would press CH0-AD and then press the LV button

The **Clr. Mark** button clears **Clip Code** and **CWT** fields. At sites where condition fish are examined for **CWT**, the 1st click of **Clr. Mark** clears the **Clip Code** while the 2nd click of **Clr. Mark** makes **CWT** “blank”.

Weight and Length:

The **Enter Weight** and **Enter Length** buttons allow the user to return focus of the number key pad to the corresponding field. This allows the user to use the number pad to enter in the data into the desired field. The **Clr. Weight** and **Clr. Length** buttons clear the values in the weight or length fields and also return focus of the number key pad to the corresponding field.

Enter Weight	Clr. Weight	Enter Length	Clr. Length
--------------	-------------	--------------	-------------

Species, Special Species, and Miscellaneous Incidental Species:

These buttons allow the user to enter the following **Species** data: 1) **CH1-AD** for yearling Chinook with an adipose clip, 2) **CH1** for unclipped yearling Chinook, 3) **CH0-AD** for subyearling Chinook with an adipose clip, 4) **CH0** for unclipped subyearling Chinook, 5) **ST-AD** for steelhead with an adipose clip, 6) **ST** for an unclipped steelhead, 7) **CO-AD** for a coho with an adipose clip, 8) **CO** for an unclipped coho, 9) **SO-AD** for a sockeye with an adipose clip, and 10) **SO** for an unclipped sockeye. In addition to these, BON, JDA, and MCN will be doing condition monitoring for lamprey juveniles. The species codes for juvenile lamprey are: 1) **AB** for Ammocoete (Brook), 2) **AP** for Ammocoete (Pacific), 3) **AS** for Ammocoete (Unknown), and 4) **MP** for Macrophthalmia (Pacific). The **Species Code** is a required field and only one species button can be pushed for each fish. If the wrong species button is pressed by mistake, simply press the correct species button to overwrite the mistake.

CH1-AD	CH0-AD	ST-AD	CO-AD	SO-AD
CH1	CH0	ST	CO	SO

Fish Condition Touch Screen species codes for ALL sites

AB	AS
AP	MP

Additional species codes for lamprey juveniles at BON, JDA, and MCN

The **Special Species** buttons include: 1) **HO** for yearling Chinook holdovers, 3) **EF** for eroded fin steelhead (unclipped only), and 3) **LF** for Lyons Ferry yearling fall Chinook. These buttons **toggle** on and off. The user is only allowed to enter one special species code for each fish. If the wrong **Special Species** button is pressed by mistake, simply press it again to make that **Special Species** value go away or push a different **Special Species** button to overwrite the erroneous selection with the correct selection. **Only one Special Species type is allowed per fish record.**

HO	EF
LF	

In addition to the five target salmonid species, the user can also choose the **Misc. Incidental Species** button. For a list of the species codes see the species code listings in **Section VIII.H.3**. When this button is pressed, a pop-up appears with a button for each of the **Miscellaneous Incidental Species**, listed in alphabetical order of the common name (not the species code). The user simply presses the appropriate species button and the popup disappears, returning the user to the main touch screen. The selected incidental species code appears in the **Species** field on the **Record Browsing Panel**.



Species Code:

Cancel

Bass, Large Mouth	Bass, Small Mouth	Bluegill / Pumpkin...	Bullhead	Carp	Channel Cat	Chiselmouth
Chum	Crappie	Dace, Long Nosed	Dace, Speckled	Killifish, Banded	Lamprey Adult (Brook)	Lamprey Adult (Pacific)
Lamprey Adult (River)	Madtom, Tadpole	Other	Peamouth	Perch, Yellow	Pike Minnow, N...	Salmon, Pink
Sand Roller	Sculpin	Shad, Adult	Shad, Juvenile	Shiner, Redside	Siberian Prawn	Stickleback, 3 Spine
Sturgeon, Green	Sturgeon, White	Sucker, Bridgelip	Sucker, Largescale	Sucker, Mountain	Sucker, Species	Tench
Trout, Brook	Trout, Brown	Trout, Bull	Trout, Cutthroat	Trout, Rainbow	Walleye	Warmouth
Whitefish, Lake	Whitefish, Mountain					

IX. Validation

IX.A. Automatic Data Validation and Alerts.

Throughout **FPC32.net**, there are many automatic data validation process that occur for several fields when data are entered. Many of these validation process result in **Alert/Error Messages** that alert the user to a *possible* error in data entry. It's important to note, however, that **FPC32.net** was designed to allow the user to save all data that are entered by the user, regardless of whether the data were a were entered in error. The details for many of the various data checking algorithms are explained in the detailed instructions for entering data in **Section VIII**. However, there are too many validation procedures throughout **FPC32.net** to guarantee that we have covered them all.

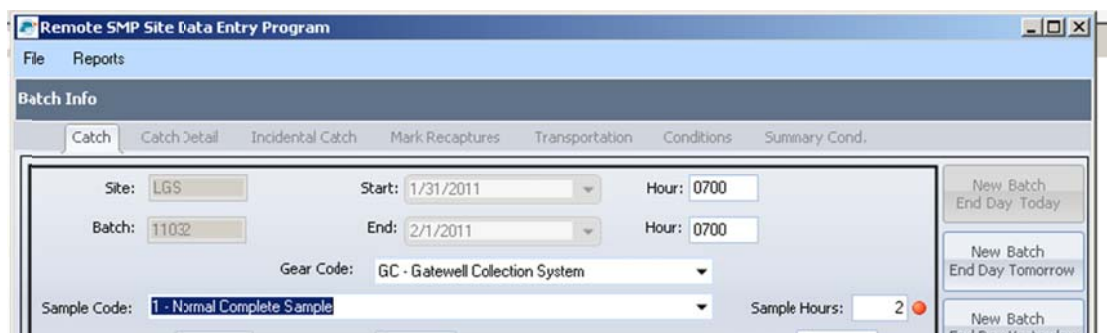
The **Alert/Error Messages** fall into a couple of basic categories. Below is a detailed explanation of the various **Alert/Error Messages** that a user may encounter when entering data with **FPC32.net**, followed by examples of each.

IX.A.1 – Suspect Data Entry Alert – Red Dot

When a user is entering a combination of data that are outside of the validation criteria, a **Red Dot** will appear on the suspect data entry. This alerts the user that something on the current data entry screen does not agree with the current validation criteria and warrants further investigation.

Example 1: Improper Gear Code, Sample Code, Sample Hours Combination:

When creating a record in the **Catch** tab, this user entered a **Gear Code** of “GC”, a **Sample Code** of “1”, and a **Sample Hours** of “2”. The data validation process assumes that **Sample Hours** would be “24” when **Gear Code** “GC” and **Sample Code** “1” are entered. Therefore, an alert **Red Dot** is provided to alert the user to the suspect combination.

The screenshot shows the 'Remote SMP Site Data Entry Program' window. The 'Batch Info' tab is active, displaying fields for Site (LGS), Batch (11032), Start (1/31/2011), End (2/1/2011), Hour (0700), Gear Code (GC - Gatewell Collection System), Sample Code (1 - Normal Complete Sample), and Sample Hours (2). A red dot is visible next to the Sample Hours field, indicating a validation alert. The interface includes a menu bar with 'File' and 'Reports', and a series of tabs for different data entry categories: 'Catch', 'Catch Detail', 'Incidental Catch', 'Mark Recaptures', 'Transportation', 'Conditions', and 'Summary Cond.'.

Example 2: Improper Species, Special Species Combination:

When creating a record in the **Catch Detail** tab, this user entered a record with a **Species** of “CH” and **Special Species** of “EF”. Since **Special Species** “EF” is limited to steelhead, a **Red Dot** appears, along with a **Special Species Validation Alert** to alert the user of the suspect combination. For more details

on which **Species**, **Special Species** combinations are valid, see **Section VIII.B.1 – Special Species Code**.

The screenshot shows the 'Remote SMP Site Data Entry Program' window. The 'Catch Detail' tab is active. The form contains the following data: Site: LGS, Sub Batch: 1, Sequence: 1, Tank/Trap: A, Species Code: CH - Chinook, Age Code: 1, Fin Clipped: Y, Cwt: Y, Special Species: EF - Eroded Int. A red box highlights a 'Special Species Validation Alert' icon on the right side of the form.

Example 3: Improper Sample Code, Sub-batch Combination:

When creating a record in the **Catch** tab, this user entered a **Sample Code** of “1”. However, when entering data in the **Catch Detail** tab, the user created a second sub-batch with a different sample rate. This prompted a **Red Dot** and a **Sample Code Validation Alert** to alert the user of the suspect combination. In this case, the user should continue data entry for this record and save the record. Then, before entering the next record, the user should navigate back to the **Catch** tab and edit **Sample Code** to “10”.

The screenshot shows the 'Remote SMP Site Data Entry Program' window. The 'Catch Detail' tab is active. The form contains the following data: Site: LGS, Sub Batch: 2, Sequence: 1, Tank/Trap: A, Species Code: CH - Chinook, Age Code: 1, Fin Clipped: Y, Cwt: Y, Special Species: - n/a, Gear Code: GC - Gatewell Collection System, Multiplier: 120.5 - 0.83% (0.0083), Sample Rate: 0.0083. A red box highlights a 'Sample Code Validation Alert' icon on the right side of the form.

IX.A.2 – Suspect Data Entry Alert – Red Field in Data Review Grid

FPC32.net has validation on **Length** and **Weight** data for condition fish. If a user enters a **Length** or **Weight** that is outside of a pre-determined range for that species, the field for that entry will appear **Red** in the **Data Review Grid** of the **Condition** tab. For details on these length and weight ranges, see **Section VII.F.1-Weight** and **Section VIII.F.1-Length** above. These alerts are intended to alert the user to anomalous **Length** and **Weight** estimates that warrant review. It is up to the user to keep or delete these anomalous estimates. ***FPC does not recommend changing anomalous Length or Weight estimates. If an anomalous Length or Weight is entered for an individual, FPC recommends simply deleting the anomalous estimate.***

Example 1: Anomalous Length Entry:

When creating a record for a condition fish, the user entered a **Length** of “500” for a yearling Chinook. This length is outside the expected range for yearling Chinook fork lengths (see **Section VIII.F.1-Length**), which prompted this field to be **Red** in the **Data Review Grid**.

IX.A.3 – Data Entry Error Message

For SMP sites at the dams, entering flow and spill data is mandatory for each batch. When entering flow and spill data using the **Catch** tab, the sum of **Turbine Discharge** (or **PH1** and **PH2 Discharge** for **BO2** and **RIS**) and **Total Spill** must not exceed **Total Discharge**. If a user enters data that violate this rule, a **Data Entry Error Screen** will appear informing the user that the flow and spill data are in violation of this rule. In this case, the user must make the proper correction before these data can be saved.

Example 1: Flow and Spill Data Entry:

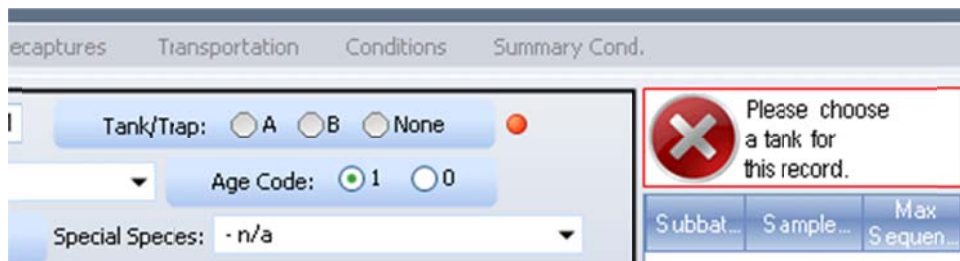
This user entered a **Total Discharge** of “200”, a **Turb Discharge** of “199” and a **Total Spill** of “10”, which prompted a **Data Entry Error Message** (see above figure). In this case, the user must click on the **OK** button and makes the proper correction before the record can be saved.

IX.A.4 – Data Reminders

When entering data with **FPC32.net**, there are some pieces of data that are entered once by the user and are automatically repeated for subsequent entries by the program. If the user forgets to enter these pieces of data on the first entry, it can become cumbersome to correct the data. In order to avoid this, **FPC32.net** has built-in Data Reminders that alert users to enter these data when entering their initial records.

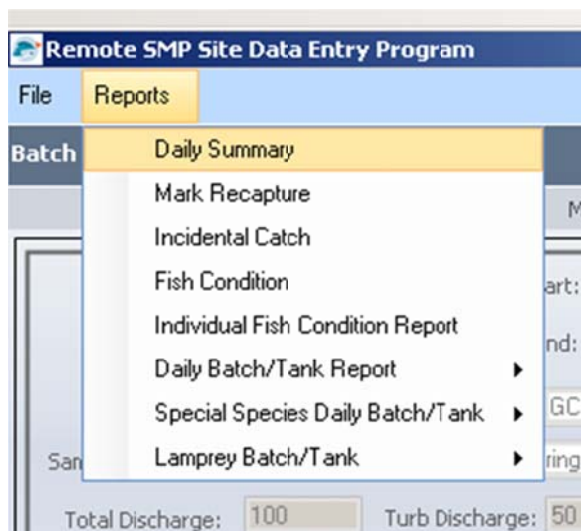
Example 1: Entering a Tank:

At **LGS**, **LMN**, and **MCN**, each time a user starts data entry for a new subbatch in **Catch Detail**, a **Data Reminder** will appear reminding them to enter a **Tank**. This is because **Tank** is repeated for all subsequent records, until the subbatch is changed or the user changes to a new **Tank**. This message is also used in the **Condition Touch Screen** for these sites.

A screenshot of a software interface for data entry. At the top, there are tabs: 'Recaptures', 'Transportation', 'Conditions', and 'Summary Cond.'. Below the tabs, there are input fields for 'Tank/Trap' (with radio buttons for A, B, and None), 'Age Code' (with radio buttons for 1 and 0), and 'Special Species' (with a dropdown menu showing '- n/a'). To the right of these fields, there is a red error message box with a white 'X' icon that says 'Please choose a tank for this record.' Below the error message, there are three buttons: 'Subbat...', 'Sample...', and 'Max Sequen...'. A red dot is visible next to the 'Tank/Trap' field.

IX.B. FPC32.net Validation Reports.

It is important that you validate your data before sending anything to the Fish Passage Center. There are several reports that can be generated to validate data entry. Data can be validated by comparing these reports to your hand logs. Below is a brief description of each of the reports that can be generated with FPC32.net and how they can be used validation. Some validation information is also provided in **Section VII.J** above.



IX.B.1 – Daily Summary Report:

The batch header information is found at the top of the **Daily Summary Report**. This report does not separate condition and non-condition fish. Target species (salmonids and lamprey) are split into three groups: 1) Clipped, 2) Unclassified, and 3) Combined. Each Species represents a column in the report. Each column has several rows of data. These rows are as follows: 1) Sample Count, 2) Collection Count, 3) Num Exam for Desc, 4) Num Descaled, 5) Facility Morts, 6) Sample Morts, 7) Research Morts, 8) PIT-tag Morts, 9) Num Bypassed, 10) Num Trucked, 11) Num Barged, and 13) Descaling Pctg. (%).

Sample Start Date : 6/24/2012 Sample Start Hour : 0700 Gear Code : GC
Sample End Date : 6/25/2012 Sample End Hour : 0700 Sample Code : 1
Number of Hours Sampled: 24 Avg. Total Discharge: 83.48 kcfs Total Turbine Discharge: 57.85 kcfs Avg. Total Spill: 25.18 kcfs

Comments :

CLIPPED TOTALS:	Chn1	Chn0	StlHd	Coho	Sock								Total
Sample Count	1	192	8	0	0								201
Collection Count	25.0	4800.0	200.0	0.0	0.0								5025.0
Num Exam for Desc	1	191	8	0	0								200
Num Descaled	0	1	0	0	0								1
Facility Morts	1	11	1	0	0								13
Sample Morts	0	1	0	0	0								1
Research Morts	0	0	0	0	0								0
PIT Tag Morts	0	0	0	0	0								0
Num Bypassed	0	0	0	0	0								0
Num Trucked	0	0	0	0	0								0
Num Barged	24	9106	473	0	0								9603
Descaling Pctg.	0.00 %	0.52 %	0.00 %	0.00 %	0.00 %								0.50 %

UNCLIPPED TOTALS:	Chn1	Chn0	ChFry	StlHd	Coho	CoFry	Sock	PacAm	BrkAm	SmAm	PacMac	LamUn	Total
Sample Count	3	364	2	4	1	0	0	14	0	0	1	0	389
Collection Count	75.0	9100.0	50.0	100.0	25.0	0.0	0.0	350.0	0.0	0.0	25.0	0.0	9725.0
Num Exam for Desc	2	363	0	4	1	0	0	0	0	0	0	0	370
Num Descaled	0	5	0	0	0	0	0	0	0	0	0	0	5
Facility Morts	1	20	0	0	0	0	0	0	0	0	0	0	21
Sample Morts	1	1	0	0	0	0	0	0	0	0	1	0	3
Research Morts	0	0	0	0	0	0	0	0	0	0	0	0	0
PIT Tag Morts	0	0	0	0	0	0	0	0	0	0	0	0	0
Num Bypassed	0	2	0	0	0	0	0	0	0	0	0	0	2
Num Trucked	0	0	0	0	0	0	0	0	0	0	0	0	0
Num Barged	73	15095	0	300	50	0	0	0	0	0	0	0	15518
Descaling Pctg.	0.00 %	1.38 %		0.00 %	0.00 %		0.00 %						1.35 %

IX.B.2 – Mark Recapture Report:

The **Mark Recapture Report** is the same as what has been generated by previous versions of FPC32. This report summarizes all fish that had Elastomer tags and does not separate condition and non-condition fish. Running this report after entering non-condition fish with Elastomer tags (prior to promoting condition fish) is the best way to validate data entry into the **Mark Recaptures** data entry tab.

SB/Trnk	Spc	Age	Type	Loc Brnd	Brnd OR	Color+TAG	Clip	Supp	Length	Total
1A	CH	1	EL		-	GR	AD		142	1
1B	CH	1	EL		-	RE	AD		137	1
1B	CH	1	ER		-	RE	AD		132	1
Subtotal - Chinook Elastomers :							3			
Subtotal - Chinook Freeze Brands :							0			
Subtotal - All Marked Chinook :							3			
Subtotal - Steelhead Elastomers :							0			
Subtotal - Steelhead Freeze Brands :							0			
Subtotal - All Marked Steelhead :							0			
Subtotal - Chin+Stlhd Elastomers :							3			
Subtotal - Chin+Stlhd Freeze Brands :							0			
Total - Chin+Stlhd Recaptures :							3			

REPORT COMPLETED NORMALLY

IX.B.3 – Incidental Catch Report

The **Incidental Catch Report** the same as what has been generated by previous versions of FPC32. This report summarizes all incidental fish, regardless of whether they were collected as part of the condition or non-condition sample. Running this report after entering non-condition incidentals (prior to promoting incidental fish from the condition sample) is the best way to validate data entry into the **Incidental Catch** data entry tab.

Species Code	Description	Sample Count	Sample Mortalities
BS	Bass, Small Mouth	1	0
PM	Peamouth	1	0
PE	Perch	1	0
SK	Stickleback	1	1
Total Incidental Catch :		4	Total Incidental Mortalities : 1

REPORT COMPLETED NORMALLY

IX.B.4 – Fish Condition Report

The **Fish Condition Report** is designed similarly to the **Daily Summary Report**. This report summarizes the prevalence of each of the conditions from the condition sample. Target salmonid species are split into three groups: 1) Clipped, 2) Unclipped, and 3) Combined. Each species represents a column in the report. Each column has several rows of data. These rows are as follows: 1) Num Sampled, 2) Descaling 20% or greater, 3) Injury, 4) Predation, 5) Disease or Parasite, and 6) Total With Conditions. This report is NOT meant to be used for validation, it is simply a summary of the conditions seen for a particular day's sample. Condition fish with the Other Conditions (Fin Hemm., Pop Eye, Pink Fin, Fin Discol., and Eye Hemm.) are NOT included in the Injury row.

Page 1 FISH PASSAGE CENTER Date 2/3/2012 3:45:40 PM
Site MCN Conditions Report for Batch # 11153 from File: MCN11153.XML

CLIPPED TOTALS:

	Chn1	Chn0	St	Coho	Sock	Total
Num Sampled	21	24	6	0	5	56
Descaling 20% or greater	1	0	1	0	0	2
Injury	0	0	1	0	0	1
Predation	2	1	0	0	0	3
Disease or Parasite	0	0	0	0	0	0
Total with conditions	2	1	1	0	0	4

UNCLIPPED TOTALS:

	Chn1	Chn0	St	Coho	Sock	PacAm	BrkAm	SmAm	PacMac	Total
Num Sampled	7	31	5	13	13	3	2	2	2	78
Descaling 20% or greater	0	0	0	1	1					2
Injury	1	1	0	1	1	1	0	0	2	7
Predation	0	2	0	0	0	0	0	0	0	2
Disease or Parasite	0	0	0	1	1	0	0	0	0	2
Total with conditions	1	3	0	2	2	1	0	0	2	11

IX.B.5 – Individual Fish Condition Report

The **Individual Fish Condition Report** lists each fish that was sampled as part of the condition sample via the touch screen. This report was intended for review of condition data in order to determine obvious errors from data entry (e.g., anomalous lengths or weights, incorrect species, etc.). Condition fish are sorted by sub batch, tank, and sequence. The condition data are divided into five groups: 1) Disease/Parasite, 2) Injuries, 3) Predator, 4) Other Conditions, and 5) Descaling. The report uses codes for each of the conditions within these groupings. A detailed listing of these codes and their meaning can be found below.

Sub				Special		Elast						Disease/Parasite					Injuries					Predator			Other Conds					Descaling		
Batch	Tank	Seq	Species	Species	Clip	Loc	Color	CWT	Weight	Length	FU	CO	KD	PA	DE	OD	HI	EI	OP	BI	FI	PB	PF	PL	PE	FH	FP	FD	EH	PD	DS	DP
1 A		1	CH0		AD				5.8	80																						
1 A		2	CH0		AD				11.6	100																						
1 A		3	CH0						10.8	101																						
1 A		4	CH1		AD				30.0	142													PL									
1 A		5	CH0						12.1	102													PL									
1 A		6	SO						20.8	128																						
1 A		7	CH0		AD				10.5	98													PL									
1 A		8	ST		AD				61.4	188																						
1 A		9	ST		AD				45.8	174																						
1 A		10	CH0						3.4	69																						
1 A		11	CH0						9.5	98																						
1 A		12	CH1		AD				33.9	144													PL								DS	
1 A		13	CH0						2.5	61																						
1 A		14	CH0						10.2	96																FH						
1 A		15	CH0						3.8	72																						

Disease/Parasite

FU – fungus
CO – columnaris
KD – BKD
PA – parasite
DE – deformity
OD – other disease

Injuries:

HI – head injury
EI – eye injury
OP – operculum injury
BI – body injury
FI – fin injury

Predator:

PB – bird predator
PF – fish predator
PL – lamprey predator
PO – other predator

Other Conditions

PE – popeye
FH – fin hemorrhage
FP – pink fin
FD – fin discoloration
EH – eye hemorrhage

Descaling:

PD – partial descaling (5-19%)
DS – descaled (≥20%)
DP – descaled by predator (≥20% with pred. marks)

IX.B.6 – Daily Batch/Tank Report

The **Daily Batch/Tank Report** is arranged in a matrix fashion, similar to the hand logs for many of the sites. The batch header information is found at the top of the report. This report separates fish that were sampled as part of the condition sample from those that were sampled as part of the non-condition sample. There are four summary sections to the report, including: 1) Tank A, 2) Tank B, 3) Tank None, and 4) Combined. Each Species/Clip combination represents a column in the report. Each column has several rows of data. These rows are as follows: 1) Non-Cond Sample Count, 2) Exam Desc (Non-Cond), 3) Non-Cond Descaled, 4) Condition Sample Count, 5) Condition Descaled, 6) Total Sample Count, 7) Total Collection, 8) Sample Morts, 9) Facility Morts, 10) Research Morts, 11) PIT-tag Morts, 12) Num Bypassed, 13) Num Trucked, 14) Num Barged, and 15) Descaling Pctg. (%).

Running this report after entering non-condition fish into the **Catch Detail** data entry tab (prior to promoting condition fish) is the best way to validate data entry of non-condition data. Also, after promoting condition fish, this report can be used to determine final collection counts for data entry of salmonid species into the **Transportation** data entry tab (see **Section VII.I above**). Lamprey juveniles are not included in this report (see **Section IX.B.8 below**).

Subbatch : All

Sample Start Date : 6/1/2011
Sample End Date : 6/2/2011

Sample Start Hour : 0700
Sample End Hour : 0700

Sample Code : 1

Avg. Total Discharge: 481.7 kcfs
Total Turbine Discharge: 143.4 kcfs

Number of Hours Sampled: 24
Avg. Total Spill: 333.6 kcfs

Comments :

Tank A	Chinook 1				Chinook 0				Steelhead				Coho				Sockeye			Total
	UC	CWT	CL		UC	CWT	CL	Fry	UC	EF	CWT	CL	UC	CWT	CL	Fry	UC	CWT	CL	
Non-Cond. Sample Count	12	0	24	57	0	21	41	0	0	0	0	1	4	0	0	0	9	0	0	169
Exam Desc (Non-cond.)	7	0	20	57	0	21	0	0	0	0	0	1	3	0	0	0	5	0	0	114
Non-cond. Descaled	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	5
Condition Sample Count	0	0	8	22	0	12	0	2	0	0	0	3	2	0	0	0	4	0	1	54
Condition Descaled	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
Total Sample Count	12	0	32	79	0	33	41	2	0	0	0	4	6	0	0	0	13	0	1	223
Total Collection	600	0	1600	3950	0	1650	2050	100	0	0	0	200	300	0	0	0	650	0	50	11150
Sample Morts	5	0	4	0	0	0	4	0	0	0	0	0	1	0	0	0	4	0	0	18
Facility Morts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Research Morts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PIT Tag Morts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Num Bypassed	595	0	1596	3950	0	1650	2046	100	0	0	0	200	299	0	0	0	646	0	50	11132
Num Trucked	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Num Barged	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Descaling Pctg. (%)	0.0	0.0	7.1	2.5	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2	0.0	0.0	4.2

*****Lyons Ferry or Holdover yearling fall Chinook are included in the Chinook 1 columns, depending on whether they were unclipped, CWT, or clipped*****

IX.B.7 – Special Species Daily Batch/Tank Report

The **Special Species Daily Batch/Tank Report** has all the same data and is arranged in a similar manner as the **Daily Batch/Tank Report**. However, this report only summarizes Lyons Ferry and Holdover yearling fall Chinook. Running this report after entering non-condition fish into the **Catch Detail** data entry tab (prior to promoting condition fish) is the best way to validate data entry of Lyons Ferry and Holdover yearling fall Chinook data from the non-condition sample.

NOTE: Collection counts from this report are NOT to be used for entry into the **Transportation** data entry tab, as these fish are already included in the tallies of Chinook 1 from the **Daily Batch/Tank Report** (see **Section VII.I** above).

Subbatch : All
Sample Start Date : 6/1/2011 Sample Start Hour : 0700
Sample End Date : 6/2/2011 Sample End Hour : 0700
Gear Code : GC
Sample Code : 1
Number of Hours Sampled: 24
Avg. Total Discharge: 481.7 kds
Total Turbine Discharge: 143.4 kds
Avg. Total Split: 333.6 kds
Comments :

Tank A

	Chinook 1 HO				Chinook 1 LF				Grand Total
	UC	CWT	CL	Total Ho	UC	CWT	CL	Total LF	
Non-Cond. Sample Count	0	2	0	2	0	0	0	0	2
Exam Desc (Non-Cond)	0	2	0	2	0	0	0	0	2
Non-Cond. Descalcd	0	0	0	0	0	0	0	0	0
Condition Sample Count	0	0	0	0	0	0	0	0	0
Exam Desc (Condition)	0	0	0	0	0	0	0	0	0
Condition Descalcd	0	0	0	0	0	0	0	0	0
Total Sample Count	0	2	0	2	0	0	0	0	2
Total Collection	0.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0
Sample Morts	0	0	0	0	0	0	0	0	0
Facility Morts	0	0	0	0	0	0	0	0	0
Research Morts	0	0	0	0	0	0	0	0	0
PIT Tag Morts	0	0	0	0	0	0	0	0	0
Descaling Pctg. (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Tank B

	Chinook 1 HO				Chinook 1 LF				Grand Total
	UC	CWT	CL	Total Ho	UC	CWT	CL	Total LF	
Non-Cond. Sample Count	2	0	0	2	0	0	0	0	2
Exam Desc (Non-Cond)	2	0	0	2	0	0	0	0	2
Non-Cond. Descalcd	0	0	0	0	0	0	0	0	0
Condition Sample Count	0	0	0	0	0	0	0	0	0
Exam Desc (Condition)	0	0	0	0	0	0	0	0	0
Condition Descalcd	0	0	0	0	0	0	0	0	0
Total Sample Count	2	0	0	2	0	0	0	0	2
Total Collection	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0
Sample Morts	0	0	0	0	0	0	0	0	0
Facility Morts	0	0	0	0	0	0	0	0	0
Research Morts	0	0	0	0	0	0	0	0	0
PIT Tag Morts	0	0	0	0	0	0	0	0	0
Descaling Pctg. (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

IX.B.8 – Lamprey Batch/Tank Report

The **Lamprey Batch/Tank Report** is arranged in a similar fashion as the **Daily Batch/Tank Report**. However, this report only summarizes data for lamprey juveniles, separated by tank (**Tank A**, **Tank B**, **Tank None**, and **Combined**). Running this report after entering/promoting lamprey juveniles into the **Catch Detail** data entry tab is the best way to validate these data.

Page 1
Site LGR

FISH PASSAGE CENTER
LAMPREY BATCH/TANK REPORT Batch # 12177

Date 2/13/2013 8:29:27 AM
from File: LGR12177.XML

Subbatch : All Sample Start Date : 6/24/2012 Sample Start Hour : 0700
Sample End Date : 6/25/2012 Sample End Hour : 0700
Number of Hours Sampled: 24
Sample Code : 1 Avg. Total Discharge: 83.48kcfs Avg. Total Spill: 25.18kcfs
Total Turbine Discharge: 57.85kcfs

Comments :

	Tank A				Tank B				Tank Nore					Combination Batch				
	AB	AP	AS	MP	AB	AP	AS	MP	AB	AP	AS	MP	LU	AB	AP	AS	MP	LU
Non-Cond. Sample Count	0	0	0	0	0	0	0	0	0	14	0	1	0	0	14	0	1	0
Condition Sample Count	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Sample Count	0	0	0	0	0	0	0	0	0	14	0	1	0	0	14	0	1	0
Total Collection	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	350.0	0.0	25.0	0.0	0.0	350.0	0.0	25.0	0.0
Sample Morts	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
Facility Morts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Research Morts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

IX.C. FPC Weekly Validation.

The FPC validates two random batches from every week by comparing the hand logs with the electronic batch reports for any discrepancies. For every batch with a discrepancy the FPC validates two additional batches for the same week. The FPC then contacts the appropriate site via e-mail requesting that necessary corrections be made and corrected batches be reposted. See **Section VII.L** for reposting instructions. When reposting batches sites are required to include a description of what data have been changed and why. **FPC WILL NOT UPDATE BATCHES UNLESS PROPER DOCUMENTATION IS RECEIVED.**

IX.D. FPC Validation Spreadsheets.

In addition to weekly validation, the FPC will send all sites a set of validation spreadsheets generated from our SQL database. This will be done weekly. These spreadsheets should be checked against the data in your electronic batches. If discrepancies are found then follow normal reposting procedures (see **Section VII.L**). Rows for days with no data are included, and batch numbers are included in each row to facilitate the use of pivot tables in spreadsheet programs to subtotal and grand total the counts by species rearing disposition, batch number, etc.

IX.E. End of Year Validation.

When sampling for the year is completed, each site must send an e-mail to notify the FPC staff that the sample season has ended. This e-mail should state the final batch number. If necessary this e-mail will also request a yearly validation spreadsheet including the data from the site for the entire year, which should match the sites own data records. After you have validated your end-of-year data against the FPC validation spreadsheets and all corrections have been made, you must send us an e-mail stating that your data are finalized.

IX.F. Project by Project Details for SMP Reporting Requirements

The Statement of Work Report for the contract Smolt Monitoring by Non-Federal Entities (Project # 1987-127-00) includes several milestones that pertain to the use of the FPC32.net data entry program. Below is a summary of these milestones for the various SMP projects.

1. For **Bonneville Dam** (Work Elements **N-Q**) and **John Day Dam** (Work Elements **R-T**) the Statement of Work Report for the contract Smolt Monitoring by Non-Federal Entities (Project # 1987-127-00) state the following:
 - **Milestone N-C. Sample Fish Daily and Collect Data.** [SMP personnel at Bonneville Dam will] sample fish daily throughout the monitoring season at the JMF. Collect species, condition, and external mark detail from all sampled fish. Collect detailed condition and length data from a subsample of the sample. Count and identify all incidental species caught in the samples. Tally, review, enter into computer and transmit all data to FPC daily. During periods of low fish collection, August to October, 24 hour daily samples may be held and sampled every other day.
 - **Milestone N-D. Project Operations and Flow Data Collection.** [SMP personnel at Bonneville Dam will] collect, record, and verify daily USACOE project operations and flow data and facility fish mortality within the bypass/collection system.
 - **Milestone N-E. Summarize and Verify All Sample Data on Days Collected [at Bonneville Dam].**
 - **Milestone O-A. Transmission of Project Operations.** [SMP personnel at Bonneville Dam will] transmit daily Corps project operations, flow data, fish transport numbers, facility mortalities, percent descaling and average fork length data daily or every other day during low collections periods from August to October. Ensure prompt transfer of data. Notify FPC by phone whenever we cannot transmit data by 1400 hours on weekdays and/or critical weekends via FPC32. Advise and discuss problems with FPC when they occur.
 - **Milestone R-C. Sample Fish Daily and Collect Data.** [SMP personnel at John Day Dam will] sample fish daily throughout the monitoring season at the JMF. Collect species, condition, and external mark detail from all sampled fish. Collect detailed condition and length data from a subsample of the sample. Count and identify all incidental species caught in the samples. Tally, review, enter into computer and transmit all data to FPC daily. During periods of low fish collection, August to October, 24 hour daily samples may be held and sampled every other day.
 - **Milestone R-D Summarize and Verify All Sample Data on Days Collected [at John Day Dam].**
 - **Milestone R-E. Project Operations and Flow Data Collection.** [SMP personnel at John Day Dam will] collect, record, and verify daily USACOE

project operations and flow data and facility fish mortality within the bypass/collection system.

- **Milestone S-A. Transmission of Project Data.** [SMP personnel at John Day Dam will] transmit daily Corps project operations, flow data, fish transport numbers, facility mortalities, percent descaling and average fork length data daily or every other day during low collections periods from August to October. Ensure prompt transfer of data. Notify FPC by phone whenever we cannot transmit data by 1400 hours on weekdays and/or critical weekends via FPC32. Advise and discuss problems with FPC when they occur.
2. For **Rock Island Dam** (Work Elements **V** and **W**) the Statement of Work Report for the contract Smolt Monitoring by Non-Federal Entities (Project # 1987-127-00) state the following:
- **Milestone V-C. Collect Fish for Examination.** Fish will be collected continuously during the monitoring period. Fish will be examined during regular work hours (0800-1630 hrs), unless large numbers of fish are entering the flume of the bypass trap, in which case with would be removed and recorded as the appropriate sample days catch. Fish will be delivered via the bypass elevator in a 12' x 4' x 3/5' aluminum holding tank which will be plumbed for continuous flow of river water. Small samples of fish will be re-anesthetized using a light buffered solution of MS-222 before being moved into the sampling trailer and placed in a full strength buffered solution of MS-222. Fish will be identified by species and examined for marks indicating hatchery origin and descaling. Anesthetized with will recover in a separate holding tank and be released after they have recovered from anesthesia.
 - **Milestone V-D. Collect Biological Data.** Collect biological data from salmonid migrants captured in the collection facility from 1 April to 31 August 2013. Data will be recorded daily to include by species, total count, adipose fin-clipped/unclipped status, CWT presence/absence, other external or internal marks or tags, smolt condition, and descaling.
 - **Milestone W-B. Transmit Data.** Transmit daily project operations, flow data, fish transport numbers, facility mortalities, percent descaling and average fork length data daily. Ensure prompt transfer of data. Notify FPC by phone whenever we cannot transmit data by 1400 hours on weekdays and/or critical weekends via FPC32. Advise and discuss problems with FPC when they occur.
3. For **Lower Granite Dam** (Work Elements **AI** and **AJ**), **Lower Monumental Dam** (Work Elements **AO** and **AP**), and **McNary Dam** (Work Elements **AL** and **AM**) the Statement of Work Report for the contract Smolt Monitoring by Non-Federal Entities (Project # 1987-127-00) state the following:
- **Milestone AI-C. Sample Fish Daily and Collect Data.** [SMP personnel at Lower Granite Dam will] sample fish daily throughout the monitoring season at the JMF. Collect species, condition, and external mark detail from all sampled fish. Collect detailed condition and length data from a subsample of the sample. Count and identify all incidental species caught in the samples. Tally, review, enter into computer and transmit all data to FPC daily. During periods of low fish collection, August to October, 24 hour daily samples may be held and sampled every other day.

- **Milestone AI-D. Summarize and Verify All Sample Data on Days Collected [at Lower Granite Dam].**
- **Milestone AI-E. Project Operations and Flow Data Collection.** [SMP personnel at Lower Granite Dam will] collect, record, and verify daily USACOE project operations and flow data and facility fish mortality within the bypass/collection system.
- **Milestone AJ-A. Transmission of Project Data.** [SMP personnel at Lower Granite Dam will] transmit daily Corps project operations, flow data, fish transport numbers, facility mortalities, percent descaling and average fork length data daily or every other day during low collections periods from August to October. Ensure prompt transfer of data. Notify FPC by phone whenever we cannot transmit data by 1400 hours on weekdays and/or critical weekends via FPC32. Advise and discuss problems with FPC when they occur.
- **Milestone AO-C. Sample Fish Daily and Collect Data.** [SMP personnel at Lower Monumental Dam will] sample fish daily throughout the monitoring season at the JMF. Collect species, condition, and external mark detail from all sampled fish. Collect detailed condition and length data from a subsample of the sample. Count and identify all incidental species caught in the samples. Tally, review, enter into computer and transmit all data to FPC daily. During periods of low fish collection, August to October, 24 hour daily samples may be held and sampled every other day.
- **Milestone AO-D. Summarize and Verify All Sample Data on Days Collected [at Lower Monumental Dam].**
- **Milestone AO-E. Project Operations and Flow Data Collection.** [SMP personnel at Lower Monumental Dam will] collect, record, and verify daily USACOE project operations and flow data and facility fish mortality within the bypass/collection system.
- **Milestone AP-A. Transmission of Project Data.** [SMP personnel at Lower Monumental Dam will] transmit daily Corps project operations, flow data, fish transport numbers, facility mortalities, percent descaling and average fork length data daily or every other day during low collections periods from August to October. Ensure prompt transfer of data. Notify FPC by phone whenever we cannot transmit data by 1400 hours on weekdays and/or critical weekends via FPC32. Advise and discuss problems with FPC when they occur.
- **Milestone AL-C. Sample Fish Daily and Collect Data.** [SMP personnel at McNary Dam will] sample fish daily throughout the monitoring season at the JMF. Collect species, condition, and external mark detail from all sampled fish. Collect detailed condition and length data from a subsample of the sample. Count and identify all incidental species caught in the samples. Tally, review, enter into computer and transmit all data to FPC daily. During periods of low fish collection, August to October, 24 hour daily samples may be held and sampled every other day.
- **Milestone AL-C. Summarize and Verify All Sample Data on Days Collected [at McNary Dam].**
- **Milestone AL-E. Project Operations and Flow Data Collection.** [SMP personnel at McNary Dam will] collect, record, and verify daily USACOE

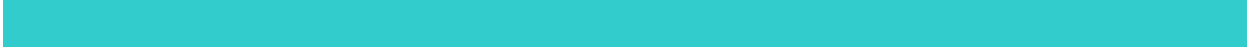
project operations and flow data and facility fish mortality within the bypass/collection system.

- **Milestone AM-A. Transmission of Project Data.** [SMP personnel at McNary Dam will] transmit daily Corps project operations, flow data, fish transport numbers, facility mortalities, percent descaling and average fork length data daily or every other day during low collections periods from August to October. Ensure prompt transfer of data. Notify FPC by phone whenever we cannot transmit data by 1400 hours on weekdays and/or critical weekends via FPC32. Advise and discuss problems with FPC when they occur.
4. For **Little Goose Dam** (Work Elements **D** and **E**) the Statement of Work Report for the contract Smolt Monitoring by Non-Federal Entities (Project # 1987-127-00) states the following:
- **Milestone D-C. Sample Fish Daily and Collect Data.** [SMP personnel at Little Goose Dam will] sample fish daily throughout the monitoring season at the JMF. Collect species, condition, and external mark detail from all sampled fish. Collect detailed condition and length data from a subsample of the sample. Count and identify all incidental species caught in the samples. Tally, review, enter into computer and transmit all data to FPC daily. During periods of low fish collection, August to October, 24 hour daily samples may be held and sampled every other day.
 - **Milestone D-D. Summarize and Verify All Sample Data on Days Collected [at Little Goose Dam].**
 - **Milestone D-E. Project Operations and Flow Data Collection.** [SMP personnel at Little Goose Dam will] collect, record, and verify daily USACOE project operations and flow data and facility fish mortality within the bypass/collection system.
 - **Milestone E-A. Transmission of Project Data.** [SMP personnel at Little Goose Dam will] transmit daily Corps project operations, flow data, fish transport numbers, facility mortalities, percent descaling and average fork length data daily or every other day during low collections periods from August to October. Ensure prompt transfer of data. Notify FPC by phone whenever we cannot transmit data by 1400 hours on weekdays and/or critical weekends via FPC32. Advise and discuss problems with FPC when they occur.
5. For **Lower Grande Ronde River Trap** (Work Elements **J** and **L**) the Statement of Work Report for the contract Smolt Monitoring by Non-Federal Entities (Project # 1987-127-00) states the following:
- **Milestone J-C. Operate Trap for Collection of Data.** [SMP personnel at the Lower Grande Ronde River Trap will] operate trap 5 nights/week March 5-May 26. This will mean lowering the trap to begin the sample period at 6:00 pm on Sunday and cessation on Friday morning at 9:00 am. Collect data on daily catch, hatchery and wild population composition, descaling, recaptures of PIT tagged parr and average length by species. Collect limited species data on incidental fish captured. Monitor fish injury rates and mortality due to trapping and sampling procedures and modify as necessary to minimize injury and mortality rates.
 - **Milestone J-D. Transmit Collection Data.** [SMP personnel at the Lower Grande Ronde River Trap will] electronically transmit salmonid collection

data to FPC daily in a standard format determined by FPC. This will be done from a site several miles upriver that has standard phone access.

- **Milestone L-A. Transmit of Project Data.** [SMP personnel at the Lower Grand Ronde Trap will] transmit electronically PIT tag tagging files within 24 hours. Transmit flow data, facility mortalities, percent descaling daily. Notify FPC by phone whenever we cannot transmit data by 1400 hours on weekdays and/or critical weekends via FPC32. Advise and discuss problems with FPC when they occur.
6. For the **Salmon River Trap** (Work Elements **AB** and **AF**) and **Snake River Trap** (Work Elements **AC** and **AG**) the Statement of Work Report for the contract Smolt Monitoring by Non-Federal Entities (Project # 1987-127-00) states the following:
- **Milestone AB-C. Operate Trap for Collection of Data.** [SMP personnel at the Salmon River Trap will] operate trap 5 nights/week March 5-May 26. This will mean lowering the trap to begin the sample period at 6:00 pm on Sunday and cessation on Friday morning at 9:00 am. Collect data on daily catch, hatchery and wild population composition, descaling, recaptures of PIT tagged parr and average length by species. Collect limited species data on incidental fish captured. Monitor fish injury rates and mortality due to trapping and sampling procedures and modify as necessary to minimize injury and mortality rates.
 - **Milestone AB-D. Transmit Collection Data.** [SMP personnel at the Salmon River Trap will] electronically transmit salmonid collection data to FPC daily in a standard format determined by FPC. This will be done from a site several miles upriver that has standard phone access.
 - **Milestone AF-A. Transmit of Project Data.** [SMP personnel at the Salmon River Trap will] transmit electronically PIT tag tagging files within 24 hours. Transmit flow data, facility mortalities, percent descaling daily. Notify FPC by phone whenever we cannot transmit data by 1400 hours on weekdays and/or critical weekends via FPC32. Advise and discuss problems with FPC when they occur.
 - **Milestone AC-C. Operate Trap for Collection of Data.** [SMP personnel at the Snake River Trap will] operate trap 5 nights/week March 5-May 26. This will mean lowering the trap to begin the sample period at 6:00 pm on Sunday and cessation on Friday morning at 9:00 am. Collect data on daily catch, hatchery and wild population composition, descaling, recaptures of PIT tagged parr and average length by species. Collect limited species data on incidental fish captured. Monitor fish injury rates and mortality due to trapping and sampling procedures and modify as necessary to minimize injury and mortality rates.
 - **Milestone AC-D. Transmit Collection Data.** [SMP personnel at the Snake River Trap will] electronically transmit salmonid collection data to FPC daily in a standard format determined by FPC. This will be done from a site several miles upriver that has standard phone access.
 - **Milestone AG-A. Transmit of Project Data.** [SMP personnel at the Snake River Trap will] transmit electronically PIT tag tagging files within 24 hours. Transmit flow data, facility mortalities, percent descaling daily. Notify FPC by phone whenever we cannot transmit data by 1400 hours on

weekdays and/or critical weekends via FPC32. Advise and discuss problems with FPC when they occur.

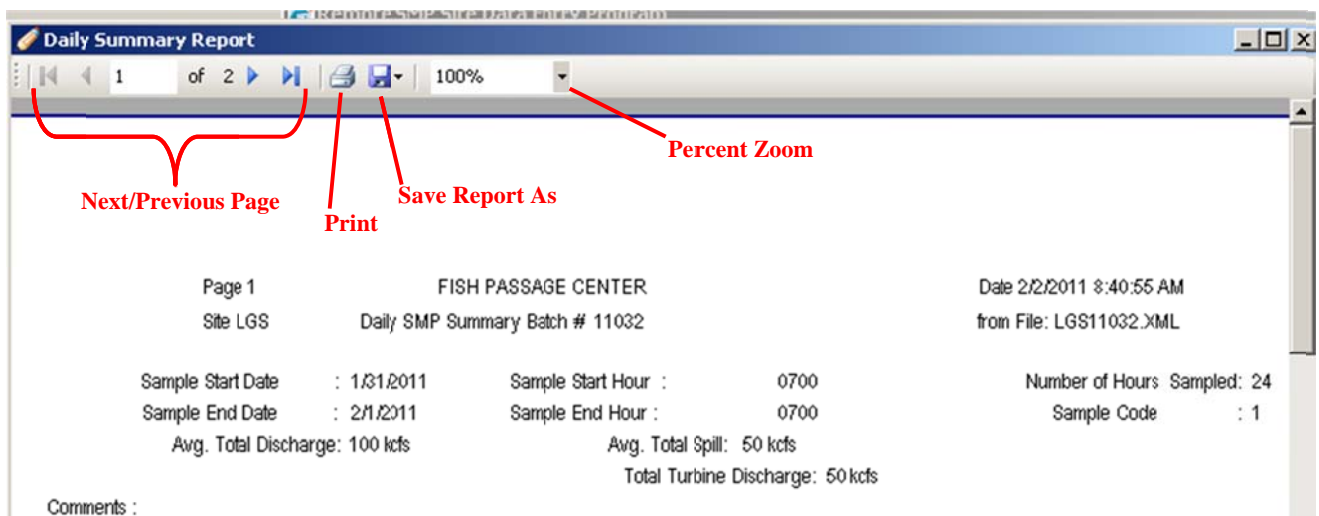
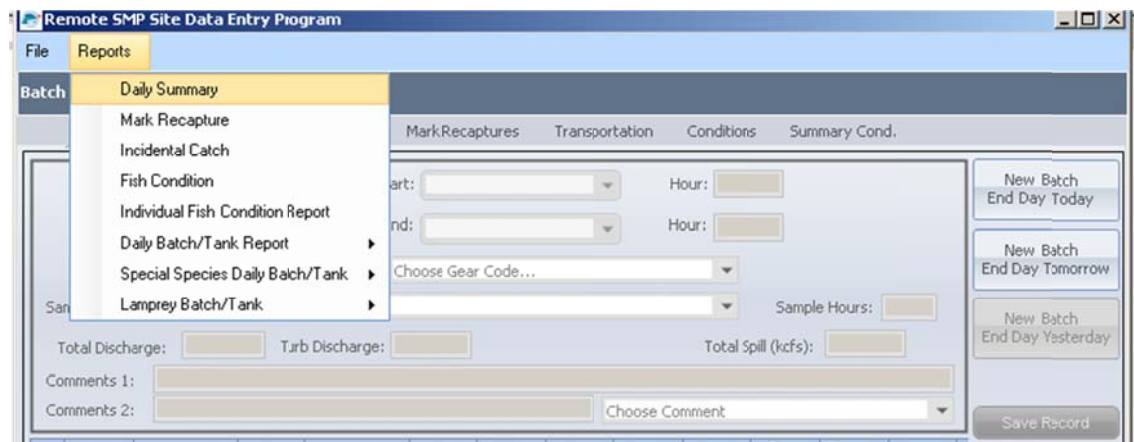


X Printing Daily Reports and Sending Data to FPC

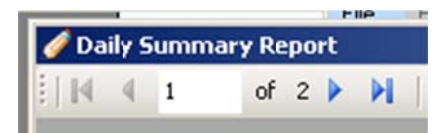
X.A. Generating and Printing Reports

There are several different reports available with the **FPC32.net** remote data entry program (see **Section IX.B** for a detailed discussion of each).

To generate a report, click on the **Catch** tab and select a batch. Choose **Reports** and choose the report you want to generate from the drop down list. Once a report is selected it may take a few moments for the report to open. A report will open in a separate **Report Viewing Window**.

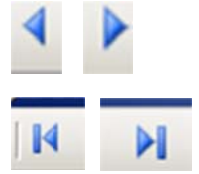


The **Report Viewing Window** has several buttons at the top that allow the user to perform different functions. Below is a brief description of these buttons and their functions.

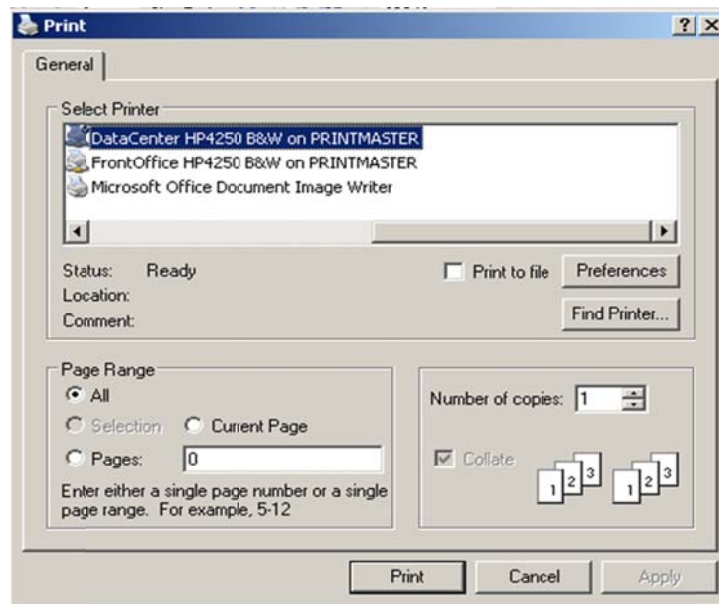


Next/Previous Page – The **Next/Previous Page** buttons allows the user to view the next or previous report pages. In addition, this section of the **Report Viewing Window** informs the user how many pages the chosen report is. If the arrow buttons are blue, then the report consists of more than one page.

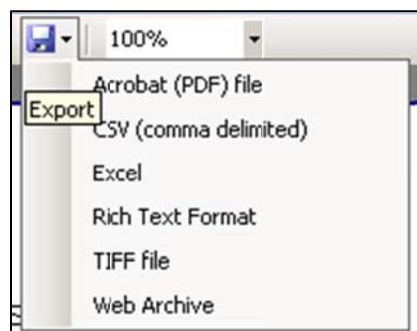
- The **Single Arrow** buttons advance the report to the next or previous page
- The **Skip** buttons advance the report to the beginning or end pages

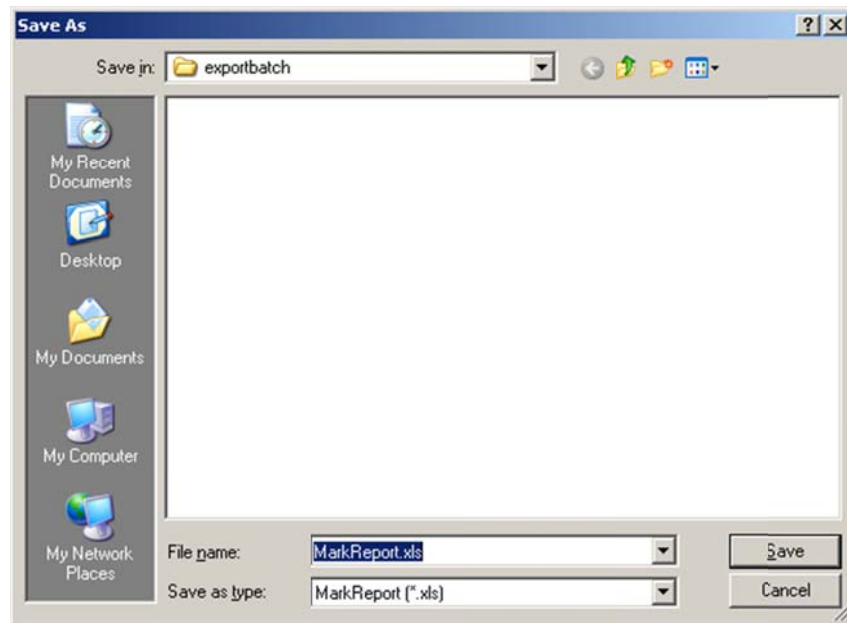


Printing Reports – The **Print** button allows the user to print the report. The **Print** button opens the **Print Dialog Box**. From here, the user can select a printer, choose a print range and choose the number of copies to be printed.



Save Report As – Clicking the **Save Report As** button opens a drop down list. This drop down lists the formats that are available for saving the report. These include: 1) Adobe (PDF), 2) Comma Separated Value (CSV), 3) Excel (XLS), 4) Rich Text Format (RTF), 5) Image (TIFF), or 6) Web Archive (html). Once the user has chosen a format for the exported report, a **Save as** dialog box appears. From this dialog box, navigate to where you want to save the report and name the report.





Percent Zoom – The **Percent Zooms** allows the user to select a zoom percentage to view report details on screen.



X.B. Sending SMP Data and Hand Logs to the FPC

New batch data (i.e., XML files) are sent to the FPC in one of two ways: 1) through e-mail or 2) via http upload. Copies of the hand logs must also be submitted (via fax or e-mail) to the FPC.

Sending New Batches Via E-mail

New batches should be sent via e-mail to smp@fpc.org with the appropriate .XML file attached. The FPC will not receive this e-mail unless your e-mail address has been cleared by the FPC data center staff. Contact the FPC Data Staff if you need to add a new e-mail address from which bathes may be sent.

If users to not want to send the final .XML file to the FPC by navigating to their e-mail program and attaching it to an e-mail, FPC32.net has a feature that allows users to send the final .XML file with the push of a button. However, this feature only works with users who have **Microsoft Outlook** configured in their office

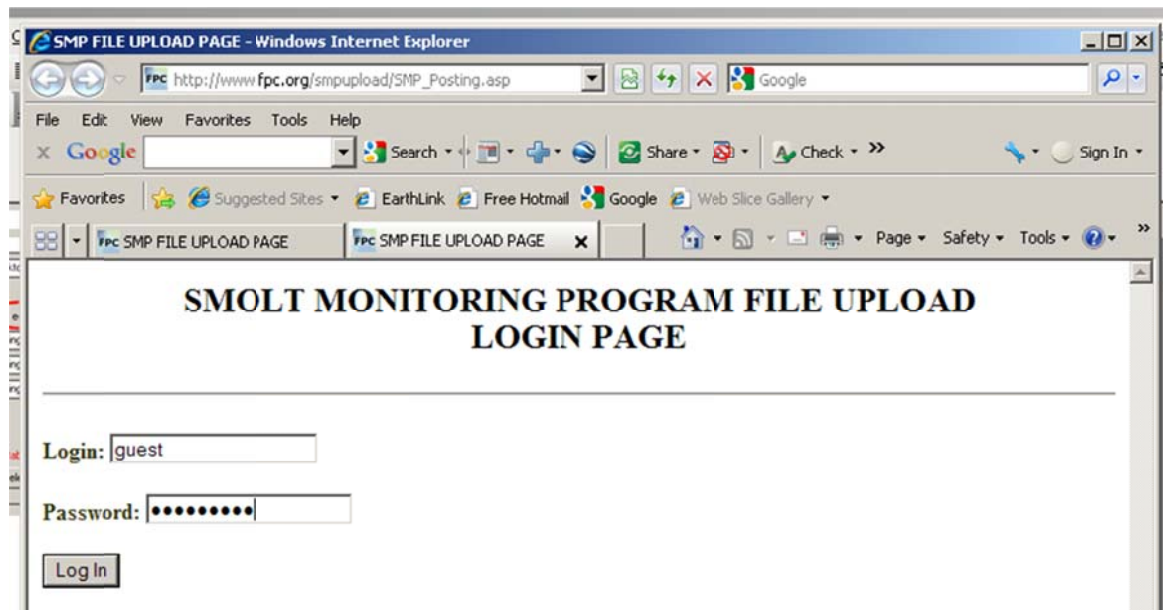
computers and have constant internet access. If you are not using **Microsoft Outlook**, you will need to send the .XML files using the procedure above.

To use this new feature, you must type smp@fpc.org into the **e-mail** field in the **Settings** tab (see picture below). Once this feature has been activated, a **Send** button will be added to the **Catch** data entry tab on the **Main Form**. Once the **Save as Batch** button has been pressed and the final .XML file is written, you may choose to send the batch automatically through FPC32.net by pushing this **Send** button. A prompt will appear asking you if you want to send an e-mail, choose **Yes**.

The image shows a software interface with a 'Setting' dialog box and a vertical toolbar. The 'Setting' dialog box has three tabs: 'Setting', 'Batch', and 'Data'. The 'Setting' tab is active, displaying various configuration options. At the top, there are three checkboxes: 'Fish Condition Touch Screen Only', 'Automatically Export Last Selected Batch When Exit', and 'Play Sound'. Below these are fields for 'Site' (BO2), 'Gear Code' (GC), 'Sample Rate Sub. 1' (0.005), 'Sample Rate Sub. 2' (0.05), 'Default Start Hour' (0700), and 'End Hour' (0700). There are also fields for 'Batch Export Directory' and 'Batch Import Directory', both pointing to 'C:\Users\bchockley\Desktop\FPC'. A red bracket highlights the 'e-mail' field, which contains 'smp@fpc.org'. Below these are three 'Custom Comment' fields. At the bottom, there is a section for 'Delete Old Batches from Database' with buttons for 'Delete Prev Year', 'Delete OK', and 'Delete All'. The vertical toolbar on the right contains buttons for 'New Batch End Day Today', 'New Batch End Day Tomorrow', 'New Batch End Day Yesterday', 'Save Record', 'Cancel', 'Edit', 'Save As Batch', 'Send', 'Import from Batch', and 'Delete'.

Uploading New Batches Via HTTP – Instead of e-mail, new batches can also be uploaded via the web. To upload a new batch, first you must navigate to http://www.fpc.org/smpupload/SMP_Posting.asp with your internet browser. To log in, enter **Login: guest** and **password: niceguest**.

The password authentication requires you to accept cookies, but you can set **Internet Explorer** to accept just cookies from FPC if you wish. To change the privacy settings in **Internet Explorer**, go to **Tools/Internet/Privacy** then click on the **Edit** button under **Web Sites**. Add the domain **fpc.org** and select **Always Allow**.



Once you have logged in, you will be directed to the **SMP Batch Upload Page** where you may upload up to 4 files at once.

SMOLT MONITORING PROGRAM FILE UPLOAD PAGE

Browse to location of FPC32 files on your local harddrive

File 1:

File 2:

File 3:

File 4:

Only FPC32 Files can be uploaded

Files already uploaded: (You must select Refresh List after each upload.)

LOG OUT

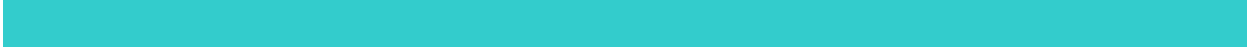
Choose **Browse** to browse to the location of the .XML file you wish to upload and click the **OK** button. Once you have uploaded all the files you wish to upload, click on the **Upload Files** button. You will receive a message about the number of files that were successfully uploaded. You can select the **Refresh List** button to check which files were uploaded.

- **Note:** Only FPC32.net files with the suffix .XML can be uploaded to this site. If you accidentally attempt to upload a non-FPC32.net file along with FPC32.net files, the .XML file will load and the results page will show you the number of .XML files that uploaded successfully, along with an error message for the incorrect file type(s).
- **Note:** Although up to 4 files can be uploaded at one time, there is a limit to the size of each file and a limit to the total size of the files that are uploaded. Currently, a single file cannot be more than 1.5 Mb in size and the total upload is limited to 3.1 Mb. If you are having trouble uploading an .XML file, check the file size. If the file is larger than 1.5 Mb, contact the data staff at FPC.
- **Note:** If you are having trouble uploading files via the web, try sending the file to the FPC via e-mail (smp@fpc.org). See above for instructions.

Sending Hand Logs to the FPC – After batches (i.e., XML file) have been submitted to the FPC, SMP personnel must also send a copy of their hand log. There are two ways to do this:

- **Fax:** Hand logs can be faxed to FPC at 503-230-7559
- **E-mail:** Hand logs can now be e-mailed as an attachment to the FPC. E-mailed hand logs must be in PDF format and should be sent to smp@fpc.org.

E-mailed hand logs can be sent in the same e-mail as the batch file (i.e., XML).



XI. What's New with FPC32.net (2013)

In 2013, the FPC will continue to support two editions of **FPC32.net** for SMP data entry. These editions are **TouchScreenSetup3.msi** and **TouchScreenSetup3_lamprey.msi**.

The **TouchScreenSetup3.msi** edition will be used by site personnel at LGR, LGS, LMN, RIS, WTB, LEW, and GRN. There were no significant changes to this edition of FPC32.net for the 2013 sampling season. To make sure you are running the most up-to date version (and edition), we suggest that all sites uninstall **FPC32.net** from their machines and download the newest version of **TouchScreenSetup3.msi** from the FTP site (<ftp://ftp.fpc.org/FPC32.net/>). See **Section VI.C.** for instructions on how to do this. If you are using a computer with Windows 7 operating system, you may need to follow instructions that allow the user to gain Full Control of SQL Express. These instructions have been added to this manual (see **Section VI.D.**)

The **TouchScreenSetup3_lamprey.msi** edition will be used by SMP site personnel at BON, JDA, and MCN. There were no significant changes to this edition of FPC32.net for the 2013 sampling season. To make sure you are running the most up-to date version (and edition), we suggest that all sites uninstall **FPC32.net** from their machines and download the newest version of **TouchScreenSetup3_lamprey.msi** from the FTP site (<ftp://ftp.fpc.org/FPC32.net/>). See **Section VI.C.** for instructions on how to do this. If you are using a computer with Windows 7 operating system, you may need to follow instructions that allow the user to gain Full Control of SQL Express. These instructions have been added to this manual (see **Section VI.D.**)

XI.A. Procedure to Allow Full Control for Windows 7 Operating System

When FPC32.net is installed on a machine with Windows 7 operating system, the user may experience problems when trying to save new records. These problems may occur each time FPC32.net is uninstalled and reinstalled. The FPC staff has found that this is often a permissions issue that can affect whether SQL Express database files can be written to by the current user. The 2013 manual has been updated to provide instructions on how to remedy these issues. These instructions can be found in **Section VI.D.**, starting on page 21.

XI.B. Lamprey Condition Monitoring (Pred Bird vs. Body Injury) (BON, JDA, and MCN)

U.S. Fish and Wildlife has asked that the FPC crews at BON, JDA, and MCN work with them to better differentiate between body injuries causes by birds (i.e., Pred Bird) and those caused by the project (i.e., Body Injury). To that effect, they have

asked that crews take pictures of Bird Marks versus Body Injuries and share them with the FPC as you go along. FPC will work with USFWS towards better defining these two categories.

In addition, USFWS would like to get a better idea of what “uncertain injuries” may look like for juvenile lamprey. To this effect, USFWS asks that, when an injury is uncertain, crews at BON, JDA, and MCN are to enter that injury and then enter a “UI” into the Special Comments field as a way to flag it. Crews are also asked to take a picture of uncertain injury if possible.



XII Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

[illegible]

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FPC32.NET MANUAL ACKNOWLEDGEMENT FORM

I, the undersigned, acknowledge that I have read the FPC32.net manual.

Name: (Please Print) _____

Signature: _____ Date: _____

Please copy this form and mail a completed and signed form to:

Fish Passage Center
Attn: Brandon Chockley
1827 NE 44th Ave, Suite 240
Portland OR 97213
Fax: 503-230-7559

